If you've got a CPC you seriously need this magazine

LETCHFORD

AMSTRAD ACTION

ISSUE No.99
December 1993
£2.95

The power of the press

CPSCENE No.1

FANZINE ... ATT...

Front page news

Get it in print

Stop press!

publish and be damned

Harness the power of the press

Discover how to become the editor of your own magazine

NEW-LOOK TAPE
- A complete AA Mastergame
- Dead smart DTP utilities

Amstrad CPC 464, CPC 6128, CPC 464 Plus
DECEMBER 1993 Serious
ACTION

Stormlord



Font Editor

PLUS
GRAB CONVERTER • CLIP ART

• TOP TIPS • FIRST REVIEWS • BEST ADVICE •



CPC PLUS

Future PUBLISHING
Your guarantee of value
NOT an official Amstrad publication

12
9 770954 806041

Line

Serious stuff

16 Encyclopaedia Amstradica

Part two of our A to Z of all things CPC. Well, all the things we remembered to put in, anyway. This month it's a whistlestop tour from J to R. Hold on to your hats.

20 UAUG's 2nd convention

The UK's largest CPC user group held a bit of shindig down in Southampton this October. Simon was there was doing a fairly good impression of a journalist.

30 Homebrew software

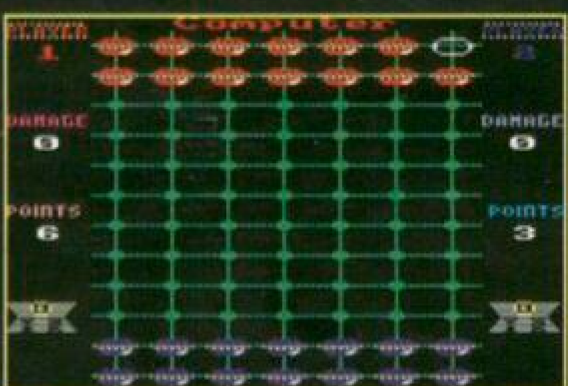
CPC games programming is turning into a thriving cottage industry. Simon checks out the indie games revolution.



Cover feature

9 DTP the CPC way

Reckon you'd like to have at try at this magazine lark? Tell you what. It's a darned sight easier if you've got desktop publishing at your fingertips. We give you complete guide to using CPC DTP to produce a fanzine, right from the inspiration, through layout and design to distribution. Plus: CPC DTP packages get the AA review treatment.



Cloak's a bit like playing chess with space ships, except all your pieces are armed with land mines and missiles. Come to think of it, that could be kinda fun in normal chess...

32 Tutorial: Venture Forth

It's here! The program you've all been waiting for. It's the AA official version of the text adventure we've been trying to get you to write over the last few months.

54 Review: ProPrint ROM

It got a great review a few months back against Sentinel's Pro-Ext, but how does it measure up on ROM? Simon takes a look at Campursoft's latest.

54 Review: Pro-Ext

It's another thing beginning with 'pro'. This time, Sentinel have upgraded Pro-Ext and released it again. Does it compete with ProPrint (considering it lost out last time)?

55 Review: ParaDOS

We take a look at Quantum's new disk utility ROM, and ask if these companies will ever stop churning out DOS utilities? Apparently not, it seems.

Leisure zone

36 Public Image PD Reviews

Public Image goes colour! With a new writer at the helm, a new design and a new attitude, Public Image is gearing up for even more big changes.

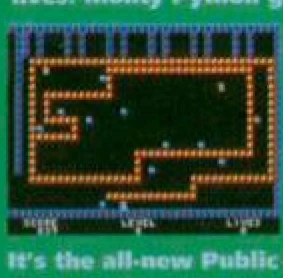
39 Reviews: Fanzines

If AA alone doesn't satisfy your literary lusts every month (if that's possible), maybe there's a fanzine out there that could meet your CPC reading requirements.





What that dead parrot needed was infinite lives. Monty Python gets Cheat Moded.





It's the all-new Public Image section, now in glorious Andy-O-Colour on page 36.

42 Cheat Mode: Games Tips

Lee Rouane has discovered the secret of eternal life. It's easy when you know how, and you will once you've read Cheat Mode.

46 The Examiner: Adventures

If your quest is for the best CPC adventure column in the universe, you've found it.

48 Power-Up: Meet The Team

The AA crew comes clean. Will you ever be able to take us seriously again? Plus – another star gets the Separated At Birth and Dizzy is this month's top trumps card.

-up

Regulars

4 Covertape

And in a packed covertape this month we've got a stonking AA Past Mastergame and loads of DTP utilities, all of which get explained on these very pages.

6 Amscene

"I read the news today," The Beatles first warbled back in 1967. And you can read it today if you want simply by turning to page six. You know it makes sense.

21 Techy Forum

Top techy tips to tantalise traumatised technically troubled CPC types (well, it would have worked if the CPC had been called a TPC or something).



"Oh – another DOS. It's just another day for you and me in Para – ParaDOS." Do you seriously expect me to believe Phil Collins actually wrote this ROM? No way!

25 Subscriptions

A week is a long time in politics but a month can slip by, so if you're not careful you could miss a copy of AA. Take precautions.

26 Type-Ins

Listings with extra added value – yes, new improved Type-Ins with Workshop to remove all those nagging coding queries.

35 Reader Ads

Bargains galore and so much more in the CPC second-hand superstore. Blimey, I'm beginning to sound like a DIY advert.

40 Reaction

The pages where we hand the magazine over to you for your views, your opinions your strange drawings of cows, your questions about Simon's musical tastes, your other weirdnesses.

57 Back Issues

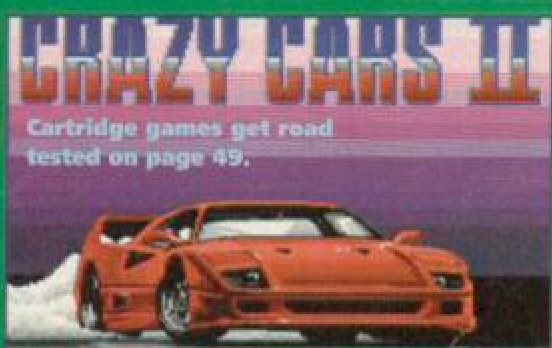
Strangely, there are some people who have not bought every issue of AA. But there is help at hand. They can be cured and it's not too late to order the issues they missed.

58 Next Month

In which we build up the excitement and tension about next issue, which, if you hadn't noticed, will be our 100th.

49 Reviews: Carts

You thought you'd seen the last of them. We thought we'd seen the last of them. But no, there are still more carts out there for sale, so we do the decent thing and review them. This month's victims include Pinball Magic, Tintin on the Moon and Wild Streets.



Cartridge games get road tested on page 49.



It's Stellar Outpost – a fine example of homebrew software.

56 Review: Stellar Outpost

In space nobody can hear Primal Scream (lucky blighters). But you can hear about how good this game is on page 56. Despite the name, Stellar Outpost isn't another one of Simon's girlfriends but a homebrew SF strategy game in the Space Crusade mould.

Serious ACTION

Want to see some serious action? You've got it on the first of our new-look AA covertapes. This month and every month from here on in you'll find on our tape at least one prime quality AA Past Mastergame plus a truly wonderful collection of utilities and serious bits. So, what's on offer this month?

Stormlord

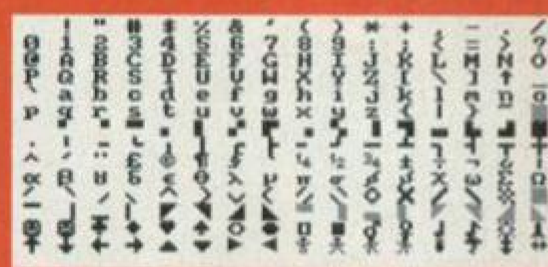
SF shoot-'em-up action of the highest calibre. A true classic to kick off the new-style covertape.



Lord of storms, rescuer of fairies, opener of doors, springer of board, blah, blah, etc.

Font Editor

First up on the serious side comes a font editor for creating snazzy letter styles courtesy of Robot PD



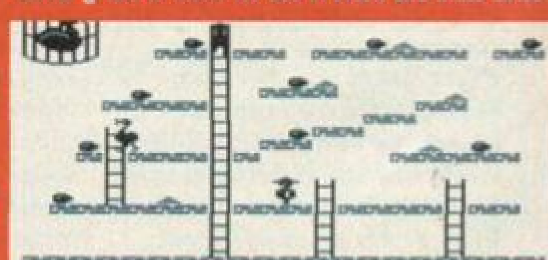
Now you can create professional pretty fonts with the greatest of ease – ahhhh!

Clip Art

And as if that weren't enough, we've got two whole screens of clip art to spruce up your DTP output from the masters of incidental graphics, Dartsma.

Grab Converter

'What about grabs?' I hear you cry. Well, we've also kitted you out with a simple program that converts colour grabs to mono for use in black and white zines.

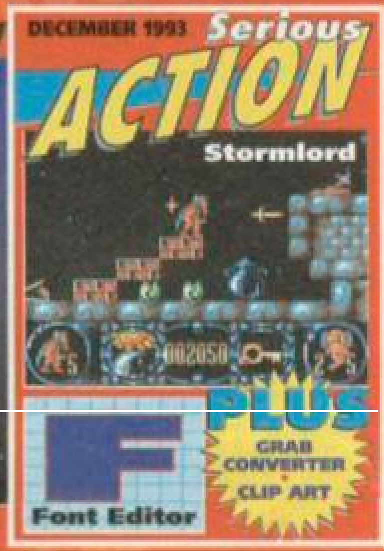


Convert grabs from unprintable colour to usable monochrome the easy way.

Turn the page for instructions

Serious ACTION

The covertape is reborn! Simon Forrester acts as the midwife.



Stormlord

Looking around furtively, Derek ran forward, blushing only slightly when a most definitely naked woman rose out of a pot to greet him.

"Rescue them," she gasped, with her last few remaining breaths, before falling gracefully backwards, sloping with feather-like beauty down on the very breath of the air itself, and landing with a loud splat in a very large puddle behind her.

"You will not die in vain," re-iterated Derek for the sake of those readers who've just joined us, "For I will find your children and lead them to the light and safety – be it the last thing I do on this mortal earth!"



Help! My hand's just exploded in blue fire!

"What are you going on about? I left my credit cards in the mystic forest – that's all" But it was too late, as Derek had already vanished into the half-light of half a light, muttering words like 'storm' and 'lord'.

For several days and several nights, Derek journeyed one screen to the left, having already rigorously defined his keys in preparation for the journey. When he thought he could travel no more, he saw what was, in his eyes, his first weapon – the Key of Domar. With the mighty key, he could open, er, well, doors. Ahem. Still it was a start, I suppose.

And so for at least, ooh, about a foot really, Derek travelled, stepping gingerly over the really quite top-heavy fallen angel, avoiding the occasional herd of pink slimy things, until he came to It. It, in order to warrant the capital 'I', was not just any old door – it was the legendary (well, in Derek's eyes anyway) Door of Domar.

Quivering with anticipation, fear and a touch of hayfever, Derek took the Key, and placed it into the Hole, behind which was the Lock. Turning the key only very slowly (for fear that Rust had aged it beyond strength), the Lock clicked back and the Door swung open with a brain-slicing creak of two ancient Hinges too long without the Oil of Domar. Derek stepped through, his journey just beginning.

"This is just too slow," shouted Derek in frustration. Having journeyed for 40 seconds and, well, another 40 seconds, he was getting more than a little irritated at the fact that he really was getting nowhere (you must have met those people – the ones that drive down to the corner shop). Spying a rather comfortable spring-mounted piece of wood, he decided to stop and take a breather.

Everything went black. Then everything went black with white dots.

Derek was aware of a slight 'whooshing' noise all around him, as well as a small sphere hovering above him. As the sphere began to grow, Derek felt sure he'd seen it somewhere before. The sphere, however, was growing rather too fast for his liking, so he shut his eyes, pressing them together with even more determination as the 'whooshing' began to get louder. Then, when Derek thought it was about time to find out not only what's going on, but in which direction this



Anyone seen Angel Heart?

Font Editor

Okay people, this is the font editor. It's basically a program that allows you to create customised lettering sets for use on-screen, and more importantly on paper for use in your fanzine (the one you'll be really tempted to create after you've read this month's feature on page 9). Without further ado, it's over to Richard Fairhurst with the more detailed instructions (he wrote the program, so he's probably the best guy to tell y'all how it works):

"8x8 fonts are used by many programs on the Amstrad, including *Advanced Art Studio* and *PowerPage*. In addition, you can use them in your own BASIC or Machine Code programs.

"This utility will help you create such fonts. The program is very straightforward to use, as the keys are listed on-screen at all times. In brief, you edit each character by moving the flashing cursor around and pressing COPY to set or reset each pixel. You can move the whole character in any direction by pressing SHIFT and the cursor keys, rotate it with R, invert with I or flip in either the x- or y-axis by X or Y. When you have edited that character, press ENTER and you can (using cursor keys and copy) select a new character from the display in the middle of the screen, which is edited in the same way.

"To save a font, press S and enter the filename. The extension .CHR will be added if you don't provide one. To load press L and enter a filename. Finally, to catalogue the disk, press C and then a file specification (eg *.CHR for all .CHR files).

"Remember that different programs like different file extensions. For example, although *Advanced Art Studio* insists on .FNT; *PowerPage* likes (although does not require) .CHR, to avoid clashes with 16x16 fonts with an .FNT extension.

"When you want to load a font into your own BASIC programs, enter this at the start of the program:

```
SYMBOL AFTER 32
h=HIMEM+1
```

"Then, you can load a font by:

```
LOAD "filename",h
```

Ta, Rich.



Look, I was drunk at the time...

Dartsma's Clip Art

Okay – this might take a little explaining, so read really carefully. On the tape you will find two normal CPC format screens, in high res mode (mode 2) stuffed full of CPC clip art. You can use them in several ways:
1 Load the screen into *Stop Press* and save them out as individual clip art files.
2 Load them into *OCP Art Studio*, saving them out as windows, and using them there.
3 Using them in either Stop Press or Art Studio files with Powerpage.
4 Load them into *Powerpage* and save them out as clip art files once more.

Whichever method you decide on, please remember that these are not normal CPC runable files. A program has been provided to display them (so you can see what you've got), but the runability of the screens ends there.

If you like what you've seen and want to expand your collection even further, contact the suppliers, Dartsma, for more details, at 47 Kidd Place, Charlton, London, SE7 8HP.



I wish I could do balancing acts like that!

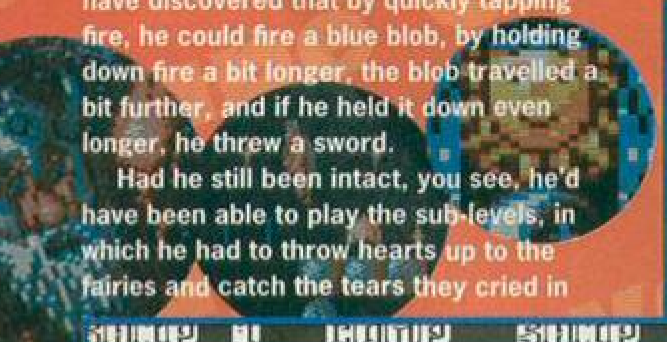
story was heading in, he opened his eyes momentarily. Don't let me mislead you here – he meant to keep his eyes fully open for at least a few seconds, but everything had gone black again. Derek realised where he'd seen that sphere before – "That'll be the ground, then".

For the fourth time that fateful day, everything went black. Only this time it was really very black indeed.

Had Derek had the foresight to keep his eyes firmly open and his feet firmly downwards, and had the author of this tale not have had a penchant for violently hurting the characters in his stories, the springboard that was supposed to have helped him enormously by providing an easy way to travel great distances around fairy land would have done just that, as opposed to killing him outright.

If he had survived, he'd still be journeying round right now, rescuing fairies from gruesome deaths, and using the various objects to help them around fairyland. Derek would (had his soul not travelled to a higher plane of existence) have discovered that by quickly tapping fire, he could fire a blue blob, by holding down fire a bit longer, the blob travelled a bit further, and if he held it down even longer, he threw a sword.

Had he still been intact, you see, he'd have been able to play the sub-levels, in which he had to throw hearts up to the fairies and catch the tears they cried in





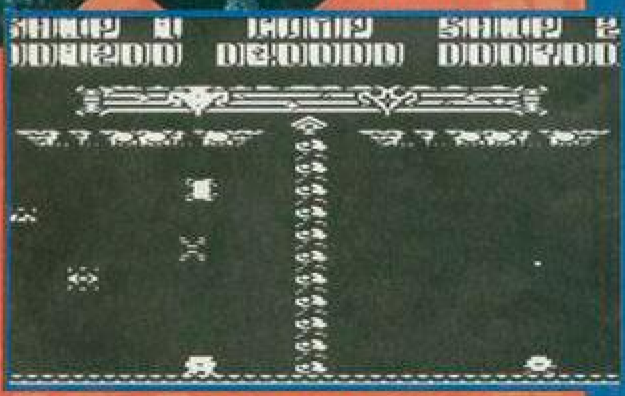
Stormy creeps up on an angel...

return (for some inane but probably quite soppy reason). But he didn't. He just spent the next four years lying around on the floor until someone happened across him one day, and put the putty knife they were holding to good use.

The abridged version

For all those who can't be bothered with the plot and just want to get down to it, we thought we'd save you a bit of time and trouble, and abbreviate things for you in a handy sort of way.

- Run around Fairyland collecting fairies (six in total).
- Tapping Fire makes Stormlord fire water.
- Holding Fire and letting go fires swords.
- Walking on springboards teleports you to another bit.
- Keys open doors.
- Honey distracts space invaders (why?).
- Umbrellas shield Stormy from the rain.
- On the bonus level, fire hearts at fairies and collect droplets of water.
- Have lots of fun and buy *Action* forever and ever and ever.



Trust me – mono grabs ARE useful.

Grab Converter

Though this isn't really one of the major bits of the covertape, we thought some of you might find it useful. The program is really quite simple, as all you have to do is give it the filename of your Mode 0 Multiface screen grab, and wait.

If you're using a tape deck, insert a blank tape and press REC and PLAY (if you've got a disk drive, just make sure there's 17K free on the disk), and the routine will save out a monochrome version of your screen, ready for loading into a DTP package.

And that's all there is to it! This little routine was actually intended for use with grabs that you want to put into your fanzine. You may have another way of doing it, but this one is the easiest method that'll be compatible with all DTP packages (all the ones we've seen, anyway).

Loading instructions

The explanatory bit

The first side of your covertape consists of three separate sections:

- *Font Editor*
- *Grab Converter*
- *Clip Art*

To load *Font Editor*, rewind the tape to the start of side A, and type:

RUN"

pressing ENTER at the end.

For every subsequent program, just run them from the tape in the same manner (and that includes *Stormlord* on side two). If you want to transfer them, however, you'd better read the next bit.

I want it on disk!

Do you, now? Well for the two programs on side A, you just have to load them up and save them back out again from BASIC. Side B can be transfered by simply selecting option two from the loading intro.

That's too much hard work

If you've got a disk drive, though, and you want a disk version of this month's *Serious Action* you can order just such a wondrous artefact from our duplicators, Ablex. All you have to do is snip off the coupon on the bottom corner of this page and send it with a cheque/PO for £2 to:

AA99 Disk Offer, Ablex Audio Video, Harcourt, Halesford 14, Telford, Shropshire TF7 4QD

The tape won't work? Surely not?

We go to great lengths to make sure that our covertapes work properly. However, if you still have difficulty, try these solutions:

- Loading at several different volume levels (if you're using an external tape recorder).
- Cleaning the tape heads. This can be done with any commercially available cleaning kit.
- Adjusting the cassette recorder's head alignment. The alignment screw is located just to the left of the tape head, and is usually accessible through a small hole. Turn it a fraction at a time with a jeweller's screwdriver. When the crispest sound is heard, the alignment is spot on.
- Tapping the cassette GENTLY against a table edge – the spools may be sticking or jammed.

If you still can't get the tape to load then send the tape, along with a brief description of the problem and a stamped SAE to:

AA99 Covertape Returns, Ablex Audio Video Ltd, Harcourt, Halesford 14, Telford, Shropshire TF7 4QD

Please don't return tapes to the AA office. If you do, we'll just feed them to Simon, and when you ring up to see where it's got to, we'll just make you feel stupid for not reading this bit.

Disk 99 Token

Amscene

What's hot and not what's not on the CPC news front.

Glasnost



Dave says, "Watcha."

Welcome to yet another wondrous issue of your favourite CPC mag, *Amstrad Action*. As well as the regular mix of news, reviews, interviews, and other things that rhyme, we're heading in a new direction – into Europe.

Sure, we do have quite a few readers dotted around the globe, and there are loads of *AA* fans in Europe already, but we've never really covered the activities of the teams producing some of the hottest code for these lovely little machines of ours – and it's not just demos they churn out either.

You see, as well as producing the kind of things that Simon jumps up and down ranting about, they're constantly flooding the PD and homebrew scene with some absolutely excellent cheap, good quality games.

So, if any European CPC coders out there want to get in contact with us, now's the ideal opportunity to do it.

Having said that, we're not going to ignore the British scene – our new regular homebrew section will continue to cover the grass roots UK scen, and we'll be first with reviews of all major commercial releases as usual.

All that aside, we hope you have as much fun reading this month's piece of the *Action* as we've had putting it all together, and we'll see you next month for the big one oh oh.

Tax evasion

Did you realise that one of the few items in Britain that can be sold without VAT is a magazine. At the next budget, however, this could all change. It's pretty obvious that publishing companies aren't happy about this, but we don't think you'll be all that chuffed either.

You see, this means that we would have to put the cover price up! You might be able to stop this whole thing now, though, by writing to The Right Honourable Kenneth Clarke MP at the House of Commons, Westminster, London to complain about the fact that you will have to pay even more for the stuff you like to read.

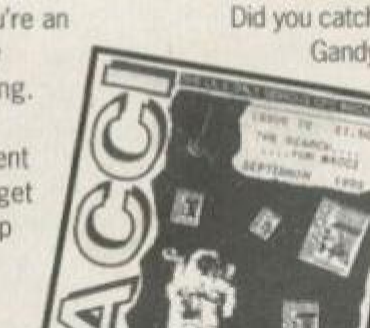
Failing that, of course, you could always subscribe – not only do you get the magazine delivered to your door, but mail order stuff doesn't get heavied by the government – in other words the tax won't affect subscribers.



Completely WACCI

Here's something you really should pay attention to – WACCI, probably the largest CPC group in the UK (see the fanzine reviews on page 39) , have decided to offer *AA* readers half-priced six-month membership which works out at a mere £4.50. The address to contact is:
7 Brunswood Green, Deeside, Clwyd CH5 3JA

And to prove you're an *AA* reader, erm, say 'kippers' or something. Failing that, just tell them that Hairy™ sent you, and you could get a cheap membership to a fanzine, with access to a PD library, a huge contact base, a helpline, etc, blah, blah.



50 per cent discount to WACCI for AA readers.

Seriously though, it really does make sense to get in on a user group of some sort – this scene needs all the support it can get at a user level, just as much as the commercial market.

Street Fighter 2 review set for AA100

The review you've been waiting for will happen – and appropriately enough in our celebratory 100th issue. Yes, *Street Fighter 2* will finally be given the thorough *AA* treatment next month.

US Gold reckon that the game will be coming straight out on budget and will be available in time for Christmas. Will it be a great Christmas present or a real turkey?



Who cares if it's out to get you? It's out... at last!

Cavernous

Did you catch a guy called Richard Gandy on *Bad Influence* recently? He was seen waving a gun around (a light gun, fortunately for presenter Andy Crane). Richard is the owner of Software Cavern in Marlowe, Buckinghamshire, and he reckons the shop contains the largest selection of CPC software on sale anywhere in the UK. In fact, it actually supplied every cart game we've reviewed this issue (starting on page 49). So if there's a CPC game you're after, give the Cavern a ring on 0628 891101.

Calling France

Just a little snippet to let you know that next month we should be taking a look at a mass of software never before seen in Britain – we're going to raid France, and plunder it of all its goodies. We'll also be taking steps to ensure its availability in Britain, so keep your eyes peeled. And believe us, some of this stuff looks like being really hot (er... 'hot' meaning good, not stolen).

Wot, no FES news?

We'd also just like to reassure our readership that the only reason we don't have any FES news is because it's already happened, and darned brilliant it was too (even though we're writing this before the event we're sure that it will have been darned brilliant by the time you read this... if you follow). Were this not the case, though, rest assured that this page would be stuffed full of even more discounts and special offers, as well as a bit of punter-enticing name-dropping.

Other than that, if you went along, we hope you had a great time – in fact, it was impossible not to. Oh yeah, and congratulations to our free ticket competition winners, whoever they will be/were (this is getting plain daft).

The Future Entertainment Show

The Amscene Directory



Anybody who's anybody in the CPC scene is in The Amscene Directory. It's a bit like The Yellow Pages, only it isn't yellow and there's only about a two-thirds of a page of it. But the principle's the same. It puts CPC users in touch with CPC users, and that can't be bad thing.

Anyway, same rules apply as last month. If you think you offer a service that should be included in the directory write in to: Amscene Directory, *Amstrad Action*, 30 Monmouth Street, Bath, Avon BA1 2BW. We reserve the right not to include anything that we feel is against the spirit of the section. Why? Because we can (and we means that we can stop anybody dubious – like software pirates – getting any publicity).

PD Libraries

Adventure PD
☎ 081 310 9877
Specialists in adventures.

Amsof
✉ Lissanly, Cloyne, Middleton, Ireland
Large range of European stuff.

Amstrad Fun
✉ 8 Springfield Drive, Templeogue, Dublin.
Large range of European stuff.

Colrob PD
✉ 9 Aviemore Road, Hemlington, Middlesborough
New tape-only PD library

Dartsma
☎ 081 317 1170
And they do loads of other CPC-related stuff as well.

Demon
✉ 47 Hilton Avenue, Hall Green, Birmingham B28 OPE
3.5-inch disk drive owners might like to investigate.

GD PD
✉ 49 Woodville, Barnstaple, Devon EX31 2HL
New library with a large selection.

PD Fun
✉ 41 Michaelgate, Kirkby Lonsdale, Via Carnforth, Lancs LA6 2BE
A policy of 'no serious software.'

Presto PD
✉ 119 Pwll Street, Landore, Swansea, West Glamorgan SA1 2PB.
The only library to offer stuff on 5.25-inch disks.

Signal Software
✉ 83 Longleat, Great Barr, Birmingham B43.

Sheepsoft
☎ 0446 736529
Based in Wales, of course. Baaaaa

Fanzines

CPC Now!
☎ 0353 663030

WACCI
☎ 0353 663030

CPC User
☎ 0329 234291
The UAUG's fanzine.

CPC Undercover
✉ 37 Trimingham Drive, Brandlesholme, Bury

User Groups

Amstrad Contact
☎ 0403 753348
Sussex-based group run by Dave Muggeridge with a technical helpline.

UAUG (United Amstrad User Group)
☎ 0329 234291
An *AA* recommended user group.

Independent Software Companies

Avatar
☎ 0442 251705
Suppliers of Phil Craven products, and a few of the Bonzo titles (and don't ask what Bonzo titles are – it'd take too long to explain).

BoxForm
☎ 051 336 2668
A software house specialising in, would you believe, betting software. It takes all sorts in this world.

Campursoft
☎ 041 554 4735
You name it, they do it, really – take a look at the interview in ish 96.

Gary & Scott Kennedy
☎ 061 736 1204
Authors of *Trakers*, a truly great CPC game (don't argue).

New Age Software
☎ 01049-711-4201920
Responsible for the dull *Zap'T'Balls*, the excellent *Soundtrakker*, and hopefully a few more titles.

Quantum Computing
☎ 0446 746920
The new breakaway sect of STS that looks set to pick up where the original good plans fell short.

SD Microsystems
☎ 0760 720381
Specialists in business software – take a look at the feature in *AA*93.

Sentinel Software
☎ 081 876 7032
Suppliers of selected STS titles (probably Quantum titles, now), and a few original products.

Siren Software
☎ 061 724 7572
It'd take a hell of a time to list everything they do – check out their ad (it's the yellow half-page one).

STS ☎ 0446 746920
This lot deal with S/DOS, *The Dizzy Utility*, *Disc Imager*, *Disc Archiver*.

The Big Softies

Alternative Software
☎ 0977 797777

CodeMasters
☎ 0926 814132

Gremlin/GBH
☎ 0742 753423

Ocean/Hit Squad
☎ 061 832 6633

Titus/Fox Hits
☎ 071 700 2119

Touchdown
☎ 0268 541126

Virgin
☎ 081 960 2255

US Gold/Kixx
☎ 021 356 3388

Zeppelin Software
☎ 091 385 7755

Hardware

Romantic Robot
☎ 081 200 8870
Creators of the Multiface – There's a complete list of cheats in *AA*90.

WAVE ☎ 0229 829109
Suppliers of loadsa good stuff – their ad is on the back cover.

Mail Order

Trading Post ☎ 0952 462135
Great for cart games (see page 42).

Trojan ☎ 0554 777993
The people to speak to for cartridge and lightgun stuff.

Spares and Repairs

STS ☎ 0446 746920
These guys'll do anything. Well, within reasons, of course.

Get a piece of the Action

I mean, who in their right mind would want to miss the next issue of AA? It's going to be the amazing 100th issue celebration extravaganza, and there's one way to make sure you don't miss out. Just fill in this form and hand it to your friendly neighbourhood newsagent...

MAG*SAVE

Amstrad Action 100 will be the major event of next month, and I don't want to miss out.

Dear Newsagent, could you please order me a copy of *Amstrad Action* every month, starting with the January issue, which'll hit the shelves on December 23rd. *Amstrad Action* is published by Future Publishing, and you can order it from your wholesaler. Merci.

My name ....

My address ....

....

....

WIZARD GAMES

1 NORTH MARINE ROAD, SCARBOROUGH, NORTH YORKSHIRE, Y012 7EY IF YOU'RE IN THE SCARBOROUGH AREA, COME IN AND SEE US. OPEN: Mon-Sat 9.00am-5.30pm, Sun 10am-4pm. TEL: 0723 376586

AMSTRAD CASSETTES

2 PLAYER SUPER LEAGUE	£2.99
3D TENNIS	£2.99
4 SOCCER SIMULATORS	£2.99
5-A-SIDE SOCCER	£1.99
ADDAMS FAMILY 128 only	£3.75
BALLOON BATTLES	£2.99
BANGER RACER	£2.99
BATMAN	£2.50
BOMBJACK 2	£2.99
BONANZA BROTHERS	£2.99
BUBBLE BOBBLE	£3.75
BUGSY	£0.99
CHIPS CHALLENGE	£2.99
COLOSSUS BRIDGE	£2.99
CRICKET MASTER	£2.99
DAN DARE	£1.99
DARKMAN	£3.75
DIZZY PRINCE OF YOLKFOLK	£3.75
EDD THE DUCK	£2.99
ESWAT	£2.99
EURO 2, EUROCUP	£2.99
EURO BOSS	£2.99
EUROPEAN SUPER LEAGUE 128	£2.99
F1 TORNADO	£2.99
F15 STRIKE EAGLE	£2.99
FIREMAN SAM	£2.50
FIRST PAST THE POST	£2.99
FUN SCHOOL 4 UNDER 5'S	£5.99
G-LOC (128)	£2.99
GAUNTLET 3 (128)	£3.50
GRAND PRIX	£2.99
GREEN BERET	£2.50
INTERNATIONAL FOOTBALL	£2.99
INTERNATIONAL MANAGER	£2.99
INTERNATIONAL RUGBY	£1.99
JETSONS	£3.99
JAHANGAR KHAN SQUASH	£2.99
KICK OFF	£1.99
LEAGUE CHALLENGE	£2.99
LEAGUE FOOTBALL	£2.99
LINE OF FIRE	£2.99
MASTERS OF THE UNIVERSE	£2.99
MERCS	£2.99
MIG 29	£2.99
MINI OFFICE	£2.99
MOTOR CYCLE 500	£2.99
MULTI-PLAYER SOCCER MANAGER	£2.99
MYTH	£2.99
NARCO POLICE	£2.99
NINJA SPIRIT	£2.99
NINJA REMIX	£2.99
OBLITERATOR	£2.99
ON THE BENCH	£2.99
OUTRUN EUROPA/G LOC	£3.99
PERISCOPE UP	£1.50
PIT FIGHTER/SUPER SPACE INVADERS	£3.99
PLATOON	£2.99
PLAYDAYS AGE 3-8	£2.99
PREDATOR 2	£2.99
PRO BOXING SIM	£1.99
PRO GOLF	£1.50
PRO SKI SIM	£1.99
PRO SNOOKER SIM	£1.99
PRO TENNIS SIM	£1.99
PROFESSIONAL FOOTBALLER	£2.99
PUB TRIVIA	£2.99
RBI BASEBALL 2	£2.99
RAINBOW ISLAND	£3.75
RALLY SIMULATOR	£2.50
RUGBY COACH	£1.99
SEYMOUR GOES TO HOLLYWOOD	£2.99
SHADOW DANCER/ALIEN STORM	£3.99
SIMPSONS	£3.75
SNOOKER MANAGEMENT	£2.99
SOCCER PINBALL	£1.99
SOCCER RIVALS	£2.99
SOCCER Q	£2.99
SOOTY'S FUN WITH NUMBERS - UP TO 7 YEARS	£8.50
SPELLBOUND DIZZY	£3.75
STAR DUST	£2.99
STRIKE	£2.99
STRIKER MANAGER	£2.99
SUPER CARS	£3.50
SWITCHBLADE	£2.99
SWIV (128)	£2.99
TERMINATOR 2	£3.75
TERRORPODS	£2.99
TEST MASTER	£2.99
TETRIS	£2.99
THE BOXER	£1.99
THE NATIONAL	£2.99
THOMAS THE TANK FUN WITH WORDS AGE UP TO 7	£8.50
TOYOTA CELICA RALLY	£3.50
TREBLE CHAMPIONS	£2.99
TRIVIAL PURSUIT	£2.99
VENDETTA	£2.99
WAY OF THE EXPLODING FIST	£2.99
WORLD CUP	£2.99
X OUT	£2.99
YES, PRIME MINISTER	£1.99

TURTLES SPECIAL

TURTLES GAME + TURTLES COMPUTER COLOURING BOOK - DOUBLE PACK £3.99

AZIMUTH HEAD ALIGNMENT KIT £3.99

AMSTRAD DISKS

ACTION FORCE	£5.99
A.D.A.M. ASSEMBLER + DISASSEMBLER MONITOR	£5.99
ARACHNOPHOBIA	£6.99
BACK TO THE FUTURE 2+3	£9.99
BONANZA BROTHERS	£5.99
CAPTAIN BLOOD	£6.99
CASH BOOK	£5.99
CISCO HEAT	£4.99
CLUEDO	£4.99
COLOSSUS CHESS	£6.99
COLOSSUS CHESS PCW	£6.99
COLOSSUS BRIDGE PCW	£6.99
DALEY THOMPSON'S OLYMPIC CHALLENGE	£6.99
DARK SCEPTRE	£6.99
DISCOVERY (EDITOR, ASSEMBLER, MONITOR, DISK NURSE, UTILITIES)	£7.99
DOUBLE DRAGON 3/RODLANDS	£9.99
EQUINOXE - MUSIC SOUNDTRACKER, COMPOSE YOUR OWN MUSIC WITHOUT MUSICAL KNOWLEDGE	12.99
FINAL FIGHT 128	£6.99
FOOTBALL MANAGER + EXPANSION KIT	£7.99
FOOTBALL MANAGER 3	£8.99
G-LOC	£6.99
HERO QUEST	£4.99
HUNT FOR RED OCTOBER	£5.99
I.S.S.	£6.99
JET BIKE SIM	3.99
LOTUS ESPRIT	£6.99
MAXAM II - ASSEMBLER, EDITOR + MONITOR	12.99
MERCS	£7.99
MONTY PYTHON'S FLYING CIRCUS	£4.99
MYTH	£7.99
NEW YORK WARRIORS	£2.99
NIGEL MANSELL	£8.99
NIGHT BREED	£4.99
NINJA REMIX	£6.99
PLAY + READ LEVEL 1 - AGE 4-9 YEARS	£7.99
POP UP	£6.99
POTSWORTH & CO	£6.99
PROBMX	3.99
ROCK STAR ATE MY HAMSTER	3.99
SAINT DRAGON	£5.99
SCRABBLE DELUX PCW	£6.99
SHADOW DANCER/ALIEN STORM	£9.99
SHADOW OF THE BEAST	£5.99
SIM CITY	£9.99
SMASH TV	£4.99
SPACE CRUSADE	£9.99
STEVE DAVIS SNOOKER PCW	£5.99
SUBBUTEO	£4.99
SUPER CARS	£6.99
SUPER OFF ROAD	£3.99
SUPER SPACE INVADERS + PIT FIGHTER	£9.99
SWITCHBLADE	£5.99
TAS SIGN - SIGNMAKER	9.99
TETRIS	£4.99
TURTLES	£4.99
WELLTRIS	£7.99
WORLD CLASS RUGBY	£7.99

SPECIAL OFFERS

DOUBLE PACK 1 .... £8.99
CISCO HEAT/POWER DRIFT

DOUBLE PACK 2 .... £10.99
LOTUS ESPRIT/SUPER CARS

DOUBLE PACK 3 .... £9.99
HERO QUEST/SWITCHBLADE

KID SPECIALS

SOOTY'S FUN WITH NUMBERS £8.99
THOMAS THE TANK ENGINE FUN WITH WORDS £8.99
BOTH AGE UP TO 7 YEARS .... £15.00 FOR TWO

BUDGET CASSETTES - £1.99 EACH

4 MOST CUTE
4 MOST HORROR
4 MOST SPEED STUNT
AIRBORNE RANGER
AMERICAN TURBO KING
ARCADE TRIVIA QUIZ
AUF WIEDERSEHEN MONTY
BALL BREAKER (BREAKOUT GAME)
BRAVE STARR
BULLY'S SPORTING DARTS
CABAL
CLASSIC ARCADIA 3
COLOSSEUM
DOUBLE DRAGON
DOUBLE DRAGON II
DRAGONS OF FLAME - (ADV - DUNGEONS & DRAGONS)
DYNAMITE DAN
EUROPEAN SOCCER CHALLENGE
FEAR (STORM 2)
FIRELORD
FOOTBALLER OF THE YEAR
FORGOTTEN WORLDS
GAME OVER II
GARY LINEKER'S SUPERSKILLS
GEMINI WING
GEOFF CAPES
HAVOC (HELICOPTER SIMULATOR)
I BALL 2
JIMMY'S SOCCER MANAGER
MARAUDER
RECKLESS RUFUS
ROLLING THUNDER
RUGBY COACH
SARACEN
SHINOBI
SIDE ARMS
TAG TEAM WRESTLING
TROLL
TURBO BOAT SIMULATOR
VIRGIN ATLANTIC CHALLENGE

ANY 5 OF THE FOLLOWING CASSETTES FOR £5

ACADEMY
BAT BLIP + INVADERS
BLADE WARRIOR
CALIFORNIA GAMES
CLASSIC TRAINER
GALAXY FORCE
GRAHAM GOOCH MATCH CRICKET
GRAND PRIX SIM
KENNY DALGLISH SOCCER MANAGER
MYSTICAL
OPERATION GUNSHIP
OUT RUN
POWER DRIFT
PRO POWER BOAT
PRO SNOOKER
ROOM TEN
SAMURAI TRILOGY
SHARKEY'S MOLL
TEENAGE QUEEN (S. POKER)
TIN TIN ON THE MOON
WELLTRIS (3D TETRIS)

DISK COMPILATIONS

TOLKIEN TRILOGY £9.99
THE HOBBIT/LORD OF THE RINDS/SHADOWS OF MORDOR

INTEGRAL (FRENCH INSTRUCTIONS) £9.99
LOTUS ESPRIT/SUPER SCRAMBLE/TOYOTA CELICA GT/SUPER CARS

CHAMPIONS £9.99
JAHANGAR KHAN SQUASH/MAN UTD IN EUR

GALACTIC GAMES £5.99
100M SLITHER/SPACE HOCKEY/PSYCHIC JUDO/HEAD THROWING/METAMORPH MARATHON

HIGH ENERGY £12.99
NORTH + SOUTH/TIN TIN ON THE MOON/FIRE + FORGET/TEENAGE QUEEN/HOSTAGES

LOOPZ COLLECTION £3.99
EMLYN HUGHES ARCADE QUIZ/AUDIOGENIC/HELTER SKELTER

4 SOCCER SIMS £4.99
11-A-SIDE SOCCER/5-A-SIDE INDOOR/STREET SOCCER/SOCCER SKILLS

HERO QUEST £9.99
+ RETURN OF THE WITCH LORD

SOCCER SPECTACULAR £9.99
WORLD CHAMPIONS/PETER SHILTON'S HANDBALL MARADONA/SOCCER SUPREMO/FOOTBALL MANAGER/PETER BEARDSLEY'S INTERNATIONAL FOOTBALL

DARK FORCE £6.99
MIDNIGHT RESISTANCE/NIGHTBREED

COMPUTER HITS 4 .... £7.99
ANTIRIAD/REVOLUTION/DEACTIVATORS/DANDY/STARQUAKE/SPIN DIZZY/ELEKTRAGLIDE

PRICE BREAKTHROUGH

GX4000/6128+/464+ CARTRIDGES

SWITCHBLADE £6.99
NO EXIT £7.99
CHASE HQ 2 .... £8.99

CASSETTE COMPILATIONS

EDITION 1 .... £4.99
DOUBLE DRAGON/XENON/SILKWORM/GEMINI WING

THE BIZ £4.99
DOUBLE DRAGON/R TYPE/OPERATION WOLF/BATMAN

COIN OP HITS 2 .... £4.99
DYNASTY WARS/NINJA SPIRIT/VIGILANTE/GHOULS' N' GHOSTS/HAMMERFIST

KIDS PACK 1 .... £4.99
POSTMAN PAT/POPEYE 2/SOOTY + SWEEP/WOMBLES/SUPER TED/COUNT DUCKULA

KIDS PACK 2 .... £4.99
FIREMAN SAM/COUNT DUCKULA 2/POPEYE/POSTMAN PAT 2/HUXLEY PIG/BANGERS + MASH

COMBAT 3 .... £2.99
SPAGHETTI WESTERN/2088/NINJA COMMANDO/BIONIC NINJA

HANNA-BARBERA COLLECTION £4.99
TOP CAT IN BEVERLEY HILLS/YOGI'S GREAT ESCAPE/HONG KONG PHOOEY/RUFF AND REDDY IN THE SPACE ADVENTURE

TENGEN TRILOGY £3.99
CYBERBALL/KLAX/ESCAPE FROM THE PLANET OF THE ROBOT MONSTERS

SUPER SEGA £5.99
CRACKDOWN/SHINOBI/SUPER MONACO G.P./ESWAT/GOLDEN AXE

MAX COMPILATION £4.99
TURRICAN 2/ST DRAGON/SWIV/NIGHT SHIFT

THE COLLECTORS (FRENCH INSTRUCTIONS) £3.99
SHADOW OF THE BEAST/SUPER CARS/SWITCHBLADE/LOTUS ESPRIT/GHOULS 'N' GHOSTS

INTEGRAL (FRENCH INSTRUCTIONS) £3.99
LOTUS ESPRIT/SUPER SCRAMBLE/TOYOTA CELICA GT/SUPER CARS

11 GAMES + WORD PROCESSOR £4.99
HANGMAN/FRUIT MACHINE/BRIDGE IT/EASI AMSWORD/ROLAND ON THE ROPES/ANIMAL VEGETABLE MINERAL/OH MUMMY/HARRIER ATTACK/THE GALACTIC PLAGUE/ROLAND IN THE CAVES/SULTAN'S MAZE/TIMEMAN ONE

MULTIMIX 5 .... £2.99
MONTY ON THE RUN/JACK THE NIPPER 2/AUF WIEDERSEHEN MONTY

SUPREME CHALLENGE £4.99
SENTINEL/STARGLIDER/ACE 2/ELITE/TETRIS

CHART ATTACK £5.99
SHADOW OF THE BEAST/SUPER CARS/LOTUS ESPRIT/IMPOSSOMOLE/GHOULS 'N' GHOSTS

DARK FORCE £2.99
MIDNIGHT RESISTANCE/NIGHTBREED

SPORTS + SKILLS 5 .... £2.99
WORLD SOCCER/FRUIT MACHINE/BATTLETANK/PARA ACADEMY

POPEYE COLLECTION £3.99
POPEYE 1, 2 & 3

POSTMAN PAT COLLECTION £3.99
POSTMAN PAT 1, 2 & 3

JOYSTICK THUNDER £2.99
ELIMINATOR/CYBERNOID 2/HYDROFOOL/LIGHTFORCE/EXELON

CHALLENGERS £4.99
SUPER SKI/FIGHTER BOMBER/PRO TENNIS TOUR/KICK OFF/STUNT CAR RACER

RED HOT HITS £4.99
GHOST BUSTERS/FA CUP/AGENT X 2/KANE/LA SWAT/ZOLYX/RASPUTIN/NINJA MASTER/OLLIE & LISSA/RICOCHET/WAY OF THE EXPLODING FIST/DAN DARE/TAU CETI/FORMULA 1 SIMULATOR/BRIAN SACKS CHALLENGE/I BALL/TRUST/PARK PATROL/WAR CARS/HARVEY HEAD BANGER/TARZAN/NINJA HAMPSTEAD/DRUID 2/THE BOGGIT/CATCH 23/MYSTERY OF THE NILE/MEGA APOCALYPSE/ENDURANCE/ACTIVATOR/DARK SCEPTRE

TOLKIEN TRILOGY £5.99
THE HOBBIT/LORD OF THE RINGS/SHADOWS OF MORDOR

SPORTS PACK 5 .... £2.99
WORLD SOCCER/FRUIT MACHINE/BATTLE TANK/PARA ACADEMY

GAME PACK 4 .... £2.99
SKATING USA/SNOWBALL IN HELL/GUNFIGHTER/PERISCOPE UP

MULTIMIX 3 .... £2.99
STREETFIGHTER/BIONIC COMMANDO/1943

QUATTRO RACERS £2.99
BMX/JET SKI/ATV/8

QUATTRO SPORTS £2.99
GRAND PRIX/PRO SKI/PRO SNOOKER/BMX

QUATTRO SUPER HITS £2.99
TANK/STUNTMAN/HERO/ITALIAN SUPER CAR

QUATTRO POWER £2.99
MOTO X/TURBO V8/POWERBOAT/ATV

ULTIMATE COLLECTION £5.00
SKATE WARS/STUNT CAR RACER/PRO TENNIS TOUR/ZOMBI/AFTER THE WAR/AMC

COMPUTER HITS 4 .... £4.99
PULSATOR/CITY SLICKER/REVOLUTION/STARQUAKE/DEACTIVATORS/ANTIRIAD/BRIDE OF FRANKENSTEIN/UCHIMATA/TRIAXOS/SPIN DIZZY/DANDY/ELECTRA GLADE

COMPUTER HITS 5 .... £4.99
WIZARDS LIAR/2112 AD/CONTRAPTION/KETTLE/ATTACK OF THE KILLER TOMATOES

SUPER STAR SEYMOUR £9.99
SERGEANT SEYMOUR ROBOT COP/WILD WEST SEYMOUR/SEYMOUR GOES TO HOLLYWOOD/STUNTMAN SEYMOUR/SEYMOUR SAVES THE PLANET

BIG BOX - 30 MEGA GAMES £9.99
GHOSTBUSTERS/ENDURO RACER/HACKER/BASEBALL/KNIGHTMARE/ALIENS/WONDERBOY/GFL FOOTBALL/SAILING/SUPER HANG ON/AIR RALLY/HIGH FRONTIER/BIG TROUBLE IN LITTLE CHINA/SPACE SHUTTLE/KARNOV/PLUS 15 MORE GAMES

GINORMOUS PACK £5.99
RED ARROWS/ARMY MOVES/GRID IRON 2/PRO MOUNTAIN BIKE SIMULATOR/BMX NINJA/RUGBY BOSS/EVERYONE'S A WALLY/SOCCER CHALLENGE/THE REAL STUNT EXPERTS/COMBAT ZONE/SOCCER BOSS/RUN FOR GOLD/DEAD OR ALIVE/TURBO BIKE/AUSTRALIAN RULES FOOTBALL/GUN BOAT/PUNCH + JUDY/GAME OVER/RALLY DRIVER/STRIKE FORCE COBRE

* WIZARD'S VERY SPECIAL OFFER *

30 CAP 3" DISK BOX £6.99
3" BLANK DISKS .... *EACH* £1.00
5 X 9512 PRINTER RIBBONS £8.99

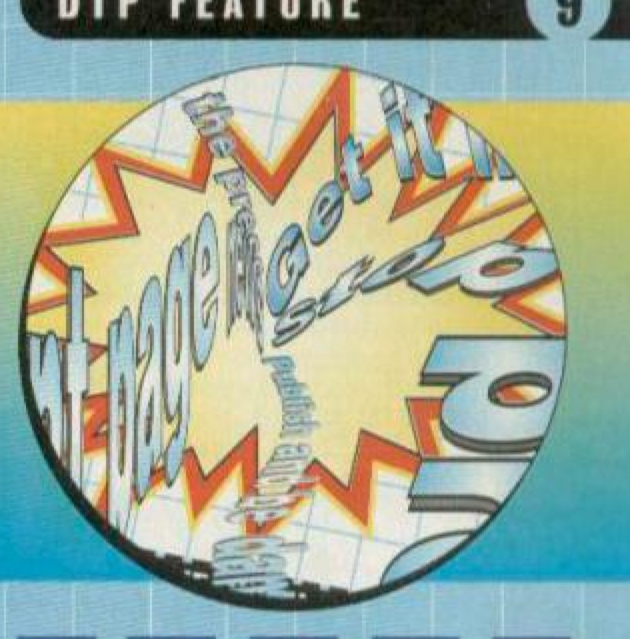
Just arrived - 2,000 Amstrad Cassettes - Our choice any 12 for £5.00

* * * ROMS * * *

UTOPIA - ADDS 50 NEW COMMANDS £16.99
PROMERGE PLUS - PROMERGE + PRINTING, EDIT, CUT AND PASTE ETC £20.99
MAXAM - ASSEMBLER, DISASSEMBLER, EDITOR £22.99

GAMES SUBJECT TO AVAILABILITY. PLEASE NOTE - A PHONE CALL RESERVES YOUR ORDER.
ORDERS UNDER £5.00 ADD 50p POSTAGE + PACKING. CHEQUES + POSTAL ORDERS MADE PAYABLE TO WIZARD GAMES.
PLEASE ALLOW 7 DAYS FOR DELIVERY.

Screen Printing



So you think you could edit a magazine, eh? Go on then, prove it. What do mean, you haven't got the resources? You're reading this mag, so you've got a CPC, right? Then all you need is a DTP package and you're away. Not convinced? Simon Forrester and Dave Golder will change your mind...

Although *Protext*, *Brunword* or *Tasword* may all be excellent word processors, you couldn't really design fanzine pages on them; at the end of the day, all they can produce is an page of straight text. So how would you go about designing a fanzine that looks more interesting? Come to think about it, how would you go about creating a fanzine anyway?

This is where we come in. Stand by for the ultimate guide to starting your own fanzine – the complete low-down from finding inspiration to getting your finished pages printed up, plus all the hard work between.

So what are the stages you have to go through to get a fanzine out of your CPC?

Step 1: Inspiration

The first thing you'll always have to sort out is what exactly the fanzine is going to be about, and what approach it's going to take. If you're a die-hard CPC fan, it's pretty obvious what subject you'll be wanting to cover, but *Amstrad Action* covers pretty much the whole CPC spectrum anyway – what extra are you going to offer to make people want to buy you?

One very easy way to discover a new angle is to look around at the fanzines already out there – there are some that just cover games, others that just cover Machine Code. In the days of old, there was a mini-fanzine called *Bonzo Bulletin*, that dealt purely with backing up games from tape to disk, discovering new transfer codes and such matters. You see, there really aren't any rules as to what you base your fanzine on – there are no limits.

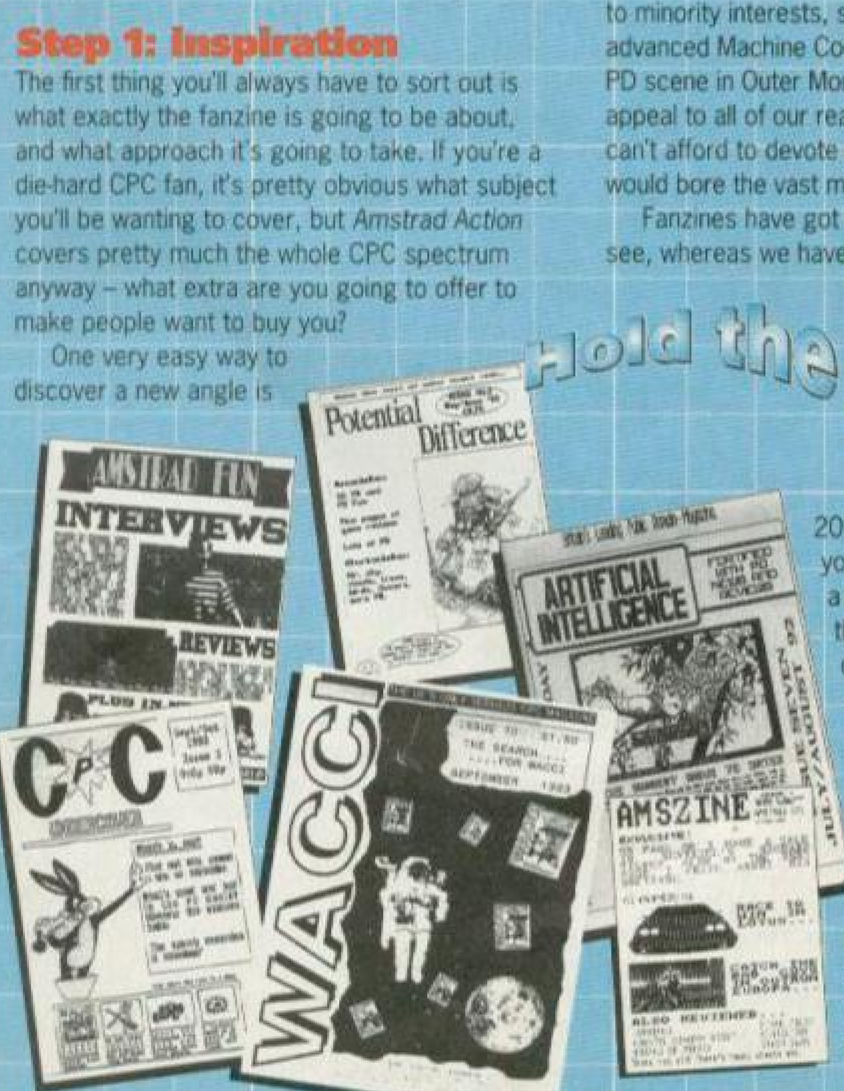
There's also a very important advantage that any fanzine has over any major newsstand publication like *AA*; we're bound by what the mass majority want to read. We're always getting letters complaining that we don't devote more coverage to minority interests, such as the demo-writing, advanced Machine Code, programming theory, the PD scene in Outer Mongolia, etc. But we have to appeal to all of our readers all of the time; we can't afford to devote pages to subjects which would bore the vast majority of our readers stiff.

Fanzines have got it a little easier, though. You see, whereas we have to cater to the tastes of 20,000 readers, you'll only have to worry about a hundred or so people at the very most, so you can cover topics that'll only appeal to about 100 readers and attract exactly the crowd you want.

So as for inspiration, your main task is to decide on an angle. Whatever you do, though, try to find a subject or a stance not covered or taken by any other existing fanzines (or *AA*, for that matter), and you might just have a very popular idea on your hands.

And this doesn't just refer to CPC fanzines. Whatever subject you want to produce a fanzine about, be it football, SF, music, bird-spotting, toe-nail collecting or badger embroidery, try to find an angle or an attitude that'll make your fanzine essential reading.

Hold the front page



What Is DTP?

DTP is an acronym that stands for DeskTop Publishing, and means exactly that – publishing (creating your fanzine, magazine, poster, etc) on a desktop (how big does your CPC have to be?).

Whereas in the olden days (when everything 'round 'ere was fields) publishing was all about sticking little metal letters in the right order on to printing presses, and a bit later (when someone had built a housing estate on the fields) it was all about cutting and pasting bits and pieces on to large sheets of paper, these days (now there's a Tesco's where the estate once was) it can all be done on computer. Basically you lay out the pages by feeding the text or pasting pictures into 'boxes' and manoeuvring these boxes on-screen.

Step 2: the writing

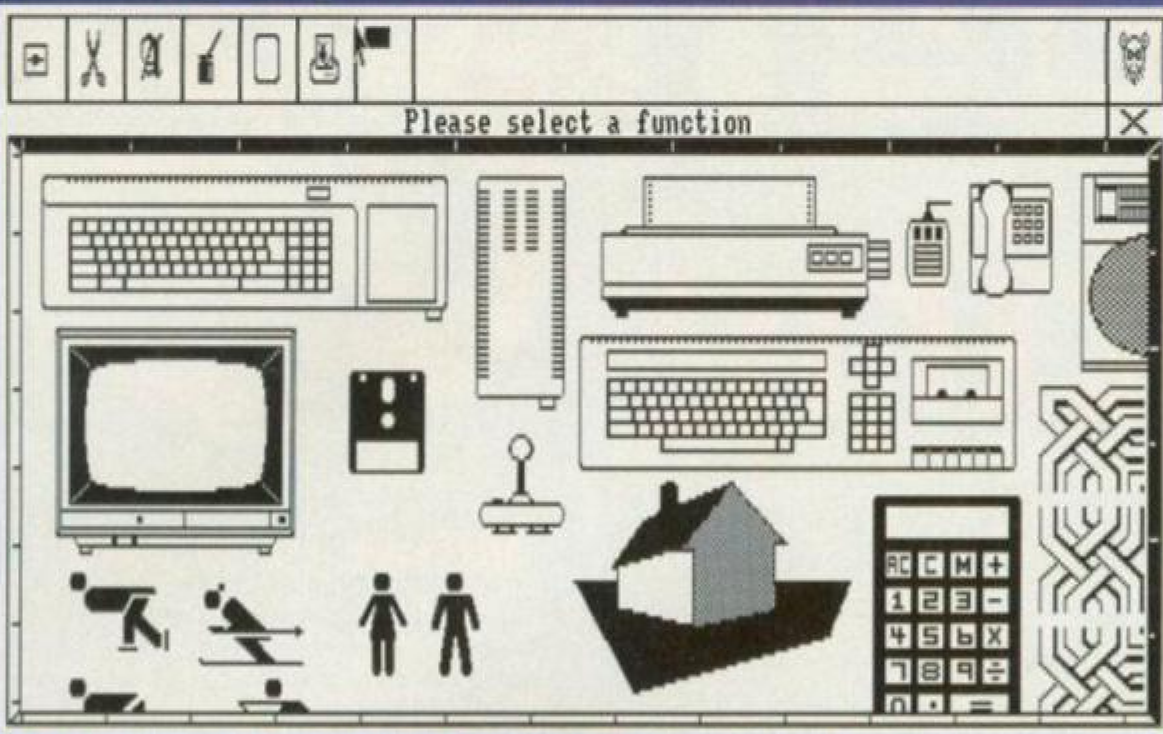
This is one of the most important aspects of fanzine writing – your copy (text). First off, though, what word processor are you going to write on? Well, assuming you're sticking with your CPC, you'll almost certainly be using either *Protext*, *Brunword* or *Tasword*. If you're not in the mood for spending any money, it'll be *Tasword*, because we gave it away on the covertape of issue 91 (which you can order using the form on page 57).

Before you start, you really ought to bear in mind that writing is much more than just sitting down and typing. It's best to have some kind of direction for your piece, and a bit of planning beforehand should help you out on that front.

- **Attitude** – First, you need to decide on the editorial style of your 'zine and make sure that you and you team of writers understand that style. This doesn't mean that all your writers should sacrifice original →

Get it in print

Which package?



And here we can see Stop Press displaying its clip art indecently for all to see. Disgusting!

Stop Press

As one of the more prestigious (and therefore expensive) DTP packages, *Stop Press* definitely filled a gap in the market as one of the first fully comprehensive attempts at CPC publishing. As an added bonus, it also came bundled with a mouse, and a hefty price (£60 originally).

But was it any good? Well, for a DTP package, it also had a fairly comprehensive range of art and text facilities, making it definitely one of the better choices for the discerning mouse-loving fanzine editor. Unfortunately, that fanzine editor had to own a 128K machine and a disk drive.

Unfortunately, it's not currently commercially available, so if you want a copy it's a case of scouring the small-ads pages.
Rating: 85%

PowerPage (6128 only)

This package started off being completely astonishing; it was a full DTP package that, almost impossibly, ran on a 64K machine. It was also PD, making it the obvious choice for budget DTPing.

However, all things must change, and the absolutely wondrous *PowerPage* must change with them, so we can now herald *PowerPage 128*! Let's cut the tosh here – it's fab. It seems like a bit of a waste of time to carry on and review all the others, because, though we may seem a little biased (after all, it was written by our very own Richard Fairhurst), it really is the most fully comprehensive package around. You can get it from Robot PD for only £2.25 plus SSAE, and for a package that'll take care of absolutely anything you'll ever want to do in the process of churning out your pages, that's darned cheap. Oh yeah – Robot's address is 2 Trent Road, Oakham, Rutland, LE15 6HF.
Rating: 90%

Micro Design 2 (6128 only)

And here's Campursoft's DTP package (contact them for more details on 041 554 4735). If you want the full, in-depth, no-holds barred Tim Norris review, you'd be advise to check out ish 94, but I'm in the mood for a good quote right now, so:

"I'll have to wait until we get hold of the finished version and run some comparisons with the competition before I rave too much but at the moment, it's looking as if MD2 is going to be well up there with the best of them"

And from what we've seen of later versions of the package, it really is one to consider – not everybody will be a *PowerPage* fan (it is a little slow in areas), so if you want a little more speed when you DTP, *Micro Design 2* is definitely the one to go for.
Rating: 90%



Campursoft are actually planning to release MD2 on cart for the Pluses. S'true, y'know!

Publish and be damned

flair and individuality for the sake of an all-pervading magazine style, but they should all write with the same attitude.

There are four main ways you can go. The first is deadly serious, 'we are crusading to prove to the world how important a part of the fabric of modern society river widening is' attitude. These fanzines usually involve people plotting, for example, the CPC revolution, in which they overthrow the console-owning bourgeoisie and rise to power under the firm conviction that their CPC can do anything a PC can. We'll call this approach the 'pages of niggling and who was that giggling?' approach.

The second type of attitude your fanzine could have is the 'devil may care and writers may swear' approach. This is all very well, but beware, as it does prove to be rather effective at alienating a large number of potential readers (it can also be fun to write, though).



Then there's the ever-popular 'cut the info by half, and go for a laugh' approach which loads of fanzines go in for, and there's nothing wrong in that. Taking a satirical swipe at your subject can make for great reading.

Finally, if you don't really want to go to either extreme, you could stick with the 'fully comprehensive but not that offensive' style; in other words, the fanzine-as-functional-artefact, packed with no-nonsense info and an essential buy for anybody interested in the subject. It would be bought for information and not entertainment.

Structure – Don't just plunge into a page headlong. Stream of consciousness writing might have made James Joyce famous, but it's not much good for a fanzine. Think about what you're going to write; give it a beginning, middle and end; make sure it's clear what you're talking about.

The Covertape

What's on the covertape, Uncle Simon? Well, gather round and I'll tell you:

Font Editor

If you can't get that dramatic lettering effect you want with the fonts supplied with your DTP package, *Font Editor* is the solution. It allows you to design your own fonts which can then be imported on to your pages. The possibilities are limitless (er, well there probably is a limit to the number of fonts you can design on an 8x8 grid, but we're not working it out).

Clip Art

This little goodie comes in the form of two standard CPC format screens, packed with pictures and logos you can use with your DTP package to create some really snazzy pages. If you want to get hold of a bit more artwork, you can find more details on the covertape pages (4 and 5), but also check out various PD libraries. Believe me – clip art can really widen your choice of page designs (you'll have to check out the instructions with your DTP package to find out how to import the clip art on to your pages, because the method varies from package to package).

Grab Converter

If you're going to include software reviews in your fanzine, you're going to need screen grabs. If you're going to take screen grabs, you need a Multiface. Even then, though, you might not be able to get that screen grab into any form that'd be suitable for use in a black and white environment. This is the program that should solve all your problems, as it'll convert most Multiface screen shots to Mode 2 monochrome files. By the way, *Grab Converter* is a patented Hairy Happening™ production, brought to you in association with the Forrester Foundation. It could change your life©.

Designed to draw you in

Here we go on a quick guided tour around a typical DTPed page with Dave 'If you look to your left' Golder. Do you realise how many page elements are designed as 'hooks' to draw the reader in to the page? No? You soon will (and realise how we so cleverly manipulate your thoughts – nyah-ha-ha-ha).

A Logo – this is your identifying image and should be eye-catching and instantly memorable, like, say, the Jurassic Park logo which is so recognisable it can even be ripped off. You can design it with a bog-standard font like we have, but as it's going to be the same every month, it might be better to design it in an art package and really go to town on it.

B Headline – Put a bit of thought into the wording of headlines, because they are important hooks, things that'll drag the reader into the main body text. Take a look at the home brew section this month (page 30); we could have just called it 'Home Brew', which is succinct and to the point, but not very exciting and unlikely to attract people to the article. 'True Brew' may be a pretty awful pun but it draws attention to the page because it causes the reader to pause momentarily, wonder why this awful pun has been used and hopefully read further on into the page to find out.



C Strap – That's just the technical name for the slightly bolder text underneath a headline. It's function is simple – to draw the reader into the page by giving information about what the piece is about. Like headlines they can less than serious, but they need to start informing the reader what the story is about.

D Box-outs – These are boxes of text with two main functions; to give information that works better drawn away from the main text and to attract attention to a particular point. They are also useful hooks; an interesting box-out might make the browsing reader delve into the main copy.

E Crosshead – these break up the text basically, to avoid massive wodges of words, which can put people off reading. To inform is only their secondary function. Have fun with them... turn them into a running gag if you want.

F Body copy – the main text. What you want 'em to read because that's where all the goodness is.

G Grab – what we in the trade call pictures swiped from software.

H Caption – these can be very useful hooks. When you see a picture you might want to know what it is. If there's a caption telling you and it sounds interesting you may well delve into the main copy. If there isn't... well, would you bother wading through a load of text just to find out what the picture's all about? Next page please.

I Drop cap – An easy way for the reader to locate that start of the copy. We reckon they look good, too. Definitely worth the effort.

Readers are important – The smaller the reader base, the more you have to make sure you're accommodating their tastes (mercenary, huh?). You might want to make a PERSONAL STATEMENT with your fanzine, fine, but if you get too self-indulgent ask yourself – why are producing a fanzine if only one person would ever want to read it – you?

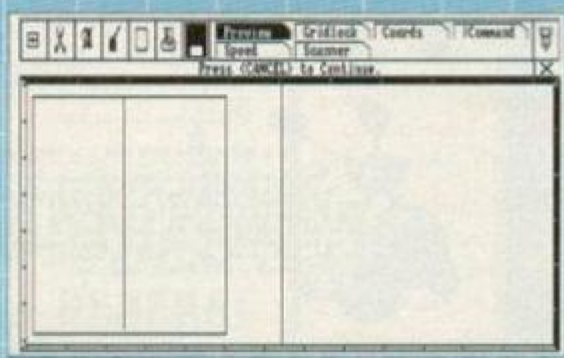
Originality – Never copy any other fanzine's style wholesale; if you can't think of anything original, don't bother.

Coverage – If you really can't think of anything new to cover, don't worry; just try and cover an old topic with a new perspective, and you might discover something really worthwhile.

Step 3: the DTP bit

Now this is where you really should fasten your seat belt; it's going to be a bumpy ride. Here we go with a step-by-step guide to laying out your page. Of course, with the huge variety of DTP packages out there, and because we have absolutely no idea which one you'll use, we can't go through exact keypresses; this is more a guide to common features and how you can use them to spruce up your pages.

Setting up a grid A grid, before you ask, is just a blank page ready to have the text laid on to it. So what format are you going to have? For instance, *AA* has three-column pages. But what would be best for you? Well, not only is a one-column page really dull, it's quite difficult to read and restricts what you can do with the design. The odds are you'd be best using two- or three-columned pages (depending what size paper you're printing your 'zine on).



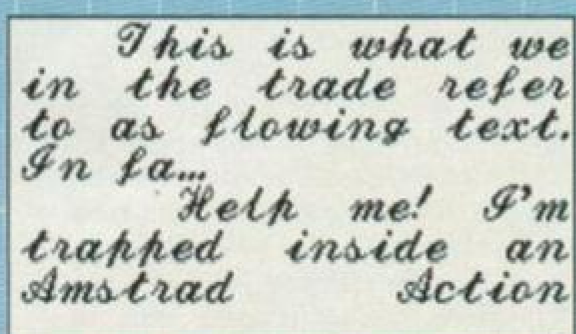
The first stage of laying out any page is to start with a completely blank grid.

Boxes Another one of the really useful things you can do with a DTP package is draw boxes. Wow. But what are they for? Well, it's simple. If you look around this feature, you'll see various bits of information pulled out from the main text and shoved into boxes. Attractive, aren't they?

Depending on what kind of DTP package you own, you'll be accomplishing this in two ways. If you have a package that supports boxed text, I'd use that option, but for those that don't have such luxury, here's what you'll want to do.

Firstly, use the graphics part of the package to draw a rectangle. Next, place your text cursor into the box, and paste your text into it. The fact that these packages will not let text overrun graphical lines will keep the text inside the box, turning it into a box-out.

Boxes can also be used to define areas into which you can drop pictures. Hey, Mr Versatility.

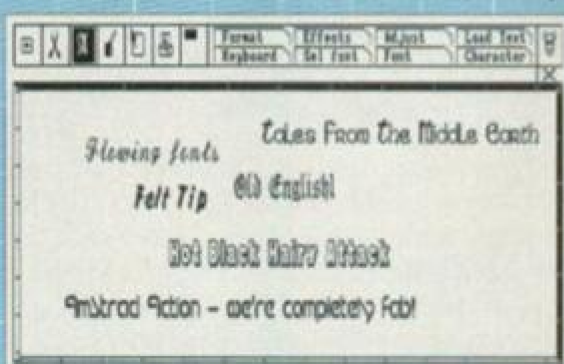


Flowing aside, you can get some really lovely fonts if you buy a copy of Stop Press.

Manipulating text Assuming you've dumped your text on the grid, the next thing to do is start styling it up. Before you do anything else, you'll have to alter the attributes, size and fonts (text styles) of the various blocks of text. For instance, the headlines need to be in the largest test size and intro text (known in the trade as 'straps' – see the design box-out) slightly smaller but still larger than the main body text.

Most CPC DTP packages offer a variety of text manipulation features and there will probably be a huge wodge of fonts to choose from as well, BUT DON'T GO MAD:

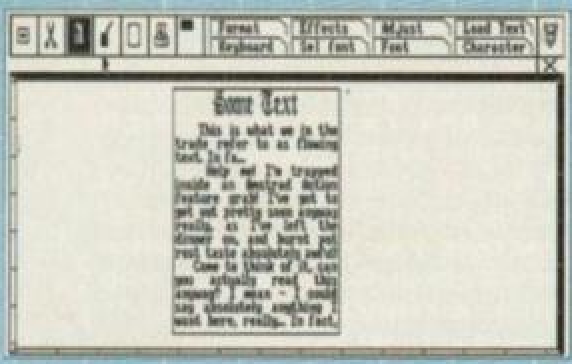
- Don't use 50 different fonts on every page you design. It'll end up looking a mess. Use one font and one size for all your main body copy, then decide on one or two other fonts/sizes for the headlines, intros and crossheads. Your zine will look much more stylish like that.
- Bear in mind the limitations of the system. The larger lettering gets, the blockier it gets (it's just the way CPC fonts are designed). →



Carrying on in the font theme, here are a few more from the Stop Press collection.

d the front page

Get it in print



Add a box or two (or three, even) – it makes your page look so much more interesting.

● Take into account things like the space between the lines (leading) and how close text flows to boxes or lines – give the page room to breath (personally I hate cramped pages – it may give value for money on a word count level, but it also gives you a headache).

Highlighted text Another effective highlighting method is to use white text on black. This can be very effective for crossheads (see the design box-out) or even headlines. A white on black section head would look very much like...

THIS!

You might be tempted to do a whole page of black-on-white text. This can look very stylish but be warned – you need an exceptionally good reproduction process to make this work. Your normal bog-standard photocopier tends to turn black into mushy, speckly shades of grey. White text on mushy, speckly shades of grey is NOT A GOOD THING.

Illustrations This is where things get a little tricky. There are a number of different options:

Importing CPC-designed pictures: All CPC DTP packages have a function which allows you to import any CPC-format pictures on to your page and place it where you want. CPC format pictures include:

● Pictures, logos or diagrams designed on a CPC art package.

● Clip art – wonderful stuff. There's some of it on the covertape this month. It's ready-drawn artwork that you can get hold of from PD libraries and use in your own masterworks.

● Digitised pictures – but since there was only ever one CPC digitiser (The Rombo Digitiser), very few people bought it and, frankly, it wasn't very good, this isn't a likely option. (Actually you can digitise on other computers – pah – and transfer the results to CPC format using programs like the one reviewed in Public Image this month on page 36).

Cut and paste: you can physically glue a picture on to your page just before you duplicate it. This means that you'll have to leave grab-size boxes on your page, so there's room to actually fit the pictures in. Okay so it sounds a bit primitive, but believe me, a lot of the time you get much better results than with grabs or digitised pictures.

Grabs: it's take your pick time again as we give you a quick run-through the options:

● Photo-reduce any pictures you want to use (on a decent photocopier) before physically gluing them on to the page just before you duplicate it (see cut and paste).

● Print out your grabs in a package like *Advanced Art Studio*, and go through the same procedure as with the photographs by reducing them, etc.

● Use the program we've provided on this month's tape. It'll work on Multiface grabs, letting you either just save them out as normal screens, or turn them into monochrome, so you can then load them straight into your art or DTP package and use them as you see fit.

Tidying up Yup, it's the boring bit. So what traps do you have to avoid? Well, there are a few:

Overflow – Okay, so it's not all that difficult to spot when the text flows over the end of a page, but you really should absolutely always keep a very good eye out for it, as nothing disappoints a reader more than following that joke doggedly through an entire page only to find the second half of the punch line has been cut clean off.

Widows – We could spend hours going through what 'widow' means, covering 'orphans', 'next of kin', and 'slightly depressed next door neighbour'. The simple point is this: if you have the last line of a paragraph with only one word on it (a widow), it looks bad. I think I'll do one right now to prove it. ← *(Yeeuchhh – Dave)*

Rectify the problem by adding or taking away words, to change the length of the sentence, but not the meaning.

And that, as General Custer would have said if he'd been a staff writer, is that.

Step 4: getting printed

To be quite honest, your best bet would be to go to a copy shop, such as Kall Kwik, who'll be quite happy to knock up a reasonable sum of issues for an even more reasonable sum of cash. Failing that, if you're at college and happen to be incredibly good at creeping round people, you might be able to work something out with them (every college is bound to have a photocopier).

Some more established and better-selling fanzines do get professionally printed, but if you're starting out it's not a viable option. Why? Because it's darned expensive.

"But how many should I print?" came the collective cry of several thousand potential fanzine editors. The answer is, to be quite honest, not many. We advise you start with only about 50 copies. You can always run off a few more if there's a demand (and remember to send one into *AA*). But this is all getting into the realms of distribution, so I'd better jump gracefully into that...

Step 5: distribution

There – wasn't that easy? Working out distribution details isn't as straightforward, however. Ask yourself a few questions:

"How much will I charge?" It's up to you, but be sensible. The easiest way to decide would be to look around for a fanzine that's approximately as large and as thick as yours, and find out what they're charging. As a rough guide, £1 for around 30 pages seems about par for the course.

"Should I offer subscriptions?" The absolutely final and most definitely definite answer here is a very firm 'yes' indeed. It's all very well to rely on your readership to send off for the fanzine every month, but some of them might miss a month, or lose interest in the summertime (that's always a bad season for computer magazines).

Subscriptions really are the answer, as they not only guarantee sales, they give you a good idea of how many to copy and they provide you with the cash up front to spend a bit more on your fanzine (a better photocopier perhaps).

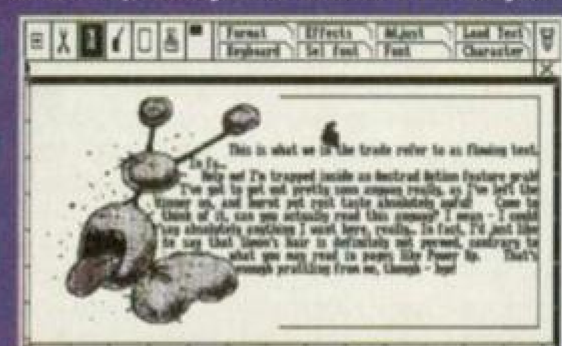
"Should I ask for an SSAE?" Again, if you're selling your fanzine issue by issue, you should – you'll be forever licking stamps and envelopes if you don't. For subscription issues though, you should offer free postage as one of the benefits of subscribing.

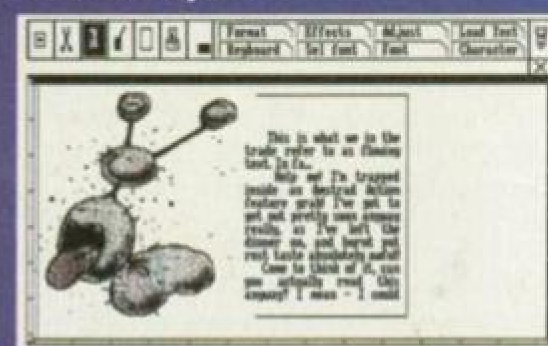
"How will people get to hear about my 'zine?" Put a small ad in *AA*. Check out the Amscene Directory and send a few publicity copies to local groups. Go to computer fairs and conventions armed with a few copies. And don't forget to mention it to your mates.

"Is it worth it?" This is the biggy. If you feel that you've got anything new to add, anything interesting to say and any new opinions about any aspects of the scene, a fanzine is a very worthwhile project. And every fanzine that starts up is another potential way of getting various, far-flung CPC fans in contact, which has to be good thing.

Flowing text around pictures

This is a term used to describe the way you can make text flow around a picture. If you import a CPC format picture the text will automatically flow around it. But if you want to paste in a photocopied picture (or whatever), what you do is draw a box on your page roughly the shape of the picture into which you can glue the picture later. Of course you could just draw a rectangular box to leave space for your picture, but, frankly, that's not very exciting; making the text follow the contours of an irregular shape is much more stylish.





It looks a lot more stylish to have the text following the contours of the picture.

Assembly Line

"Machine Code is the key to power," ranted the evil Count. "I must learn the secret of index registers and stacks so I can conquer the world. Torture the prisoner. We must know his secrets" But the lad Forrester gave nothing away, because his first duty was to Queen, country and Amstrad Action.

Enough of all this gentle introduction stuff you've been getting for the last couple of months. This time around we're getting down to some serious coding, and taking a look at something that you shall come to know forever more as index registers. Though you probably won't need them just yet, they're a concept you'd better get used to, because when they do crop up in the rest of this series, I'm not going to hang around explaining them – so on with the show.

Indexes

If you cast your mind back over the years to, ooh, it's got to be at least last issue, you'll remember all the stuff about registers. What I decided to leave out back then (it would have only confused matters) were two other registers that are available, `ix` and `iy`. These aren't normal registers, however, as they have rather special abilities – they're huuuuuge. Really, enormously big. Big on a scale of such hugeness the human mind can't comprehend them. Well, I suppose we could always give it a go; they're 256 registers each. 512 extra registers. Okay, so you can can just about get your head around the concept, but you get my point – as registers go, they're big. In a big way. In fact... (*yes, Simon we get the idea – Dave*).

Here's how to harness that power. Remember how, if you wanted a value to be placed in the accumulator, you'd use a command like the this:

```
ld a,7
```

However, with the `ix` register, you'll be using:

```
ld (ix+00),7
```

Why? Well, let's get it to hold another value in a different register, so to speak:

```
ld (ix+01),3
```

The number we changed (the displacement) can stretch all the way up to 255, or &ff in hexadecimal. This effectively gives us 256 registers (0-255 inclusive), and when you add `iy` into the equation you've got a mammoth 512 registers. So how does this actually work?

This is where things get a little complicated. Imagine, if you can, a set of 256 bytes in memory at, for example, `&8000`. If the register `ix` on its own contains the value `&8000`, then this is where the `ix` register's information is stored, making `(ix+00)` access `&8000`, and `(ix+01)` access `&8001`. Getting the hang of it yet? Good. There are a few points you really should bear in mind, though:

- The highest displacement (the number) can only be 255.
- The ix register's values are always stored somewhere in memory.
- `ix` can be changed through Assembly commands like `ld ix,&a000`.

Passing parameters

But is that the only use for the `ix` register? You can be almost sure that when that kind of question is posed in that kind of manner, the answer is bound to be 'no'. You see, Amstrad (or rather, Locomotive) BASIC was written with Machine Code programmers in mind – you can actually pass values to your Machine Code programs with the call command. Let's take a look at an example:

```
CALL &4000,&4f,&0d,&4e7d
```

That looks really straightforward, partly because it is. The only part you may have a bit of trouble grasping is the way it's presented to your Machine Code program. The main conditions are that the accumulator holds the number of parameters passed (in this case

Hey, stacks

And so, on to the wacky world of stacks (*this is obviously some strange usage of the word 'wacky' I hadn't previously been aware of – Dave*).

These don't have much to do with index registers at all, but I've got a feeling that these two subjects work well when covered together, as they're both related to readily-accessible strings of data that sit in memory and can be manipulated as extra registers and a storage facility. Stacks are funny things, you know (*this is a strange us of the word 'fu...' oh never mind – Dave*) – take a look at the following program:

```
1        push hl
2        call label
3        pop hl
4        ret
5.label :your routine
6        ret
```

Don't worry too much about the numbers at the start of the lines, and definitely DO NOT type them in, as it's just for reference within my explanation. Here we go, then:

1 Place (push) the contents of `hl` on to the stack.
2 Call the routine called label.
3 On return, remove (pop) the contents of `hl` from the stack.
4 Return to either BASIC or the rest of your m/code program.
5 The routine we're calling starts here, and can feel free to corrupt `hl` if it wants to, as we've stored the contents on the stack.
6 Return to line 3.

Of course, we could have just used:

```
push hl
your routine
pop hl
ret
```

But for the purposes of this explanation, it doesn't really work as well. You see, when the first listing calls your routine, and in fact when any call is made, the address the routine has been called from is stored on the stack as well. This can cause problems – let's look at how the stack works.

Imagine a paper spike. If I write the number held in `hl` on to a piece of paper, and stick in on to the spike, it is stored there. However, if I then write the return address for a call command on another bit of paper and stick it on to the same spike, it is in the way of the first piece of paper. This means that if we were to use the following routine...

```
1        push hl
2        call label
3        ret
4.label :pop hl
5        your routine
6        ret
```

...the `pop hl` command will actually place the call's return address into `hl`, and the `ret` in line 6 will execute memory at the address pointed to by `hl` originally, as it was pushed on to there in line 1.

This method of arrangement is called LIFO, meaning Last In, First Out. If you pushed some numbers on to the stack (say, for example, 6, 1, 2 and 8), they'd come back in reverse order (8, 2, 1 and 6).

So the stack has three main uses:

- Storing numbers.
- Structuring programs (call, ret, etc).
- Cheating returns (turning a call into a jump, and vice versa).

three), and the ix register actually holds those values. This is how it's laid out:

```
(ix+00)     &7d
(ix+01)     &4e
(ix+02)     &0d
(ix+03)     &00
(ix+04)     &4f
(ix+05)     &00
```

This looks confusing at first, but if you peer closely enough, you can see what's going on. Let's say, for example, that we wanted to get that **&4e7d** into **hl** for whatever reason. The Assembly listing to accomplish that would look something like this:

```
ld l,(ix+00)
ld h,(ix+01)
```

The ix register has been divided into pairs of numbers, each pair representing the 16-bit version of the parameter sent to the routine in the first place. The reason there are so many zeros further up the table is because numbers like **&4f** don't have their second byte filled because they're only 8-bit numbers. A few more points, then:

- Values are placed in the register low byte first.
- They're actually stacked backwards in comparison to the original CALL command.

Let's try all this out with a simple listing:

```
org &4000
limit &4fff
ld a,(ix+0)
call &bb5a
ret
```

As you can see, I've kept the actual program's function incredibly simple, so as not to distract you from the actual operation of the ix register in this whole shebang. All the same, though, this is the use of the register – passing parameters from BASIC to Machine Code.

We don't just have to pass numbers, though – what about variables?

```
a%=255
CALL &4000,a%
```

That just passes the number that was in a% to the program. What if you want the program to have some control over the variable? Here's a program that increments the contents of a variable by one:

```
org &4000
limit &4fff
ld l,(ix+0)
ld h,(ix+1)
inc (hl)
ret
```

And the BASIC bit:

```
10 a%=7
20 CALL &4000,@a%
30 PRINT a%
```

See? And, of course, we need to pass strings every now and again, so here goes, with a BASIC program, and the m/code program it's calling:

```
10 a$="Well, that worked"
20 CALL &4000,@a$
```

And the m/code:

```
       org &4000
       limit &4fff

       ld l,(ix+0)
       ld h,(ix+1)
       ld a,(hl)
       ld b,a
       ld e,(hl)
       inc hl
       ld d,(hl)
.loop  :ld a,(de)
       call &bb5a
       inc de
       djnz loop
       ret
```

And that is pretty much all there is to the index registers! So onwards, James...

So what next?

Jack	**Where do we go from here?**
Jill	**Oh, Jack darling, take me in your arms so I may remember tonight forever.**
Jack	**But times must change, Jill, and we must be ready for next month's Assembly Line.**
Jill	**But Jack, dearest, will it ever be the same again?**
Jack	**No, oh light of my life, we're going on to more complex register operations.**
Hairy	**Next month, get ready for logic operations, such as XOR, AND, OR, and register shifting. Till then, three dots will have to do...**



Protection money

As a point of interest, many early protection systems mess around slightly with stacks – not to confuse the computer however, just to throw you off the scent. For instance; when someone is trying to crack a protection system, they'll search though memory for an instruction like:

```
jp address
```

So until everybody caught on (it took the average guy around five seconds or so), this jump was replaced with something like:

```
ld hl,address
jp (hl)
```

Which is a use of registers which we looked at last month, or:

```
ld hl,address
push hl
ret
```

Did you spot it?

In case you were interested, the mystery command thrown in earlier was quite deliberate – I wanted you to have to work out what it was doing because that's a brilliant way to learn about something. The routine in question was:

```
1.loop  :ld a,(de)
2        call &bb5a
3        inc de
4        djnz loop
5        ret
```

So what was it all about? Well, the command itself is **djnz** (which means dec and jp nz), which relates directly to the **b** register. If you were to stretch the whole thing out, you'd get:

```
dec b
jp nz,loop
```

So if you look at the program above, taking into account that on entry, the **b** register holds the length in bytes of the string to be printed, what's going on is something like this:

1 Place the contents of the memory address pointed to by **de** into the accumulator.
2 Send the contents of the accumulator to the screen as ASCII.
3 Increase **de**, thereby pushing the memory address we're taking the ASCII character from along by one place.
4 Decrease **b** (the string length), and if it hasn't reached zero (if the end of the string hasn't been reached), jump back to line **1**. If it has, continue.
5 Return out of the routine.

A-Z Encyclopaedia Volume 2:

Volume Two: a guided tour of all things CPC from J to P. Simon Forrester and Dave Golder do their lexigraphical stuff.

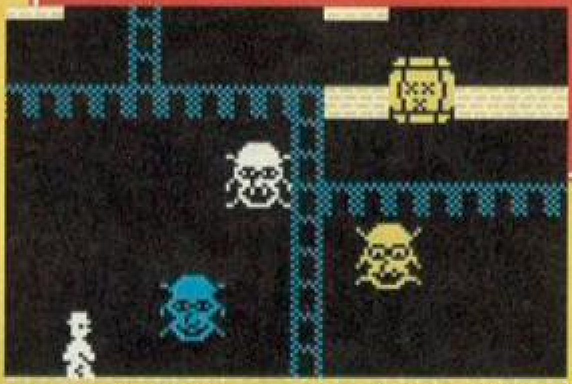
J

CLASSIC GAME

Jet Set Willy The original, the best, the one and only... Miner Willy! Yep, this is the original of originals, the game of games, the metaphor of metaphors. This is probably the first real flick-screen platform adventure game. It involved the really badly-drawn Willy running around a badly-drawn house avoiding anaesthetic monsters and collecting deformed objects.

If you've never played this game:

- You sad case – *Jet Set Willy*'s so wonderfully naff, it's got to be worth a try. Besides, it is the original.
- Congratulations – It really was dire, and deeply irritating at that. **Simon**



Joe Blade This game (or rather this series of games – there were three) is included here for its unique place in CPC history – if you wanted to test your Azimuth, this was the game to load, as it had the most fussy and error-prone loading system known to man.

Unfortunately, while being incredibly good for Azimuth testing, it wasn't much good for much else as it hardly ever loaded. Oh – the game was completely nob, as well. **Simon**



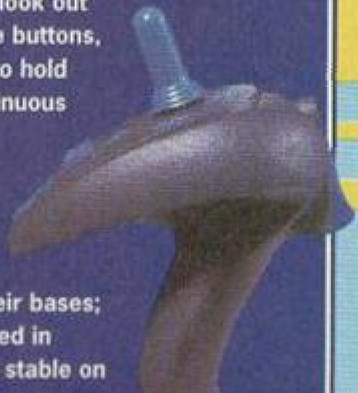
A game so bad it was ashamed to even load.

Joypad The Plus and the GX400 each came with two joypads (which are Simon's favourite control devices when it comes to playing games). And yes, we said two. Not one like you get when you buy a SNES. Even the *Street Fighter 2* SNES bundle only comes with one joypad, which is odd considering *Street Fighter 2* is essentially a two-player game. Sorry, I just thought I'd have a whinge. **Dave**

Jumpblock The area of memory filled with three byte jump instructions to the lower CPC ROM, used by Machine Code programmers to carry out various activities or functions. **Simon**

Justification Most CPC word processors automatically justify text. What this means is that all the lines of text start and end in the same place (except where you insert a Return), so that left- and right-hand edges of the text always line up (unlike the text in *AA*, for example, which is only justified to the left, leaving the right-hand edges of paragraphs ragged). Complete justification can make your text appear very tidy, but it can also lead to problems, because the word processor will adjust the space between words to keep the text justified which can look a lot weirder than ragged right edges. **Dave**

Joystick You'll find some whingey old gamesplayers from way back when who still reckon that using keyboard controls is the best way to play games (especially the ones who played *Thrust* to death) but for the rest of us, the joystick (or joypad) is an essential item. Finding the joystick that suits you is extremely important. Simon reckons Amstrad joypads are the bees' knees while I like the *Star Trek* phaser-like lines of the Konix Navigator. The Bug is another recommended 'stick. Features to look out for include autofire buttons, which enable you to hold down Fire for continuous blasting, and a switchable eight-way/four-way options. Some joysticks come with suckers on their bases; these rarely succeed in keeping the 'sticks stable on your table. **Dave**



K

Keyword A keyword is a command word in a language. BASIC has several, like PRINT, LET, CLS, etc. **Simon**

Kilobyte One kilobyte (KB) is roughly 1,000 bytes. I say roughly because the exact figure is 1024, to make maths easier for a computer that counts in base 2 and base 16 (see Hexadecimal and Binary last month). **Simon**

Kontrived This has been included to pad out the K section a bit. **Dave**

CLASSIC GAME

Kick Off It's a football game. We're not sure whether it's any good or not, but we just wanted to bring up one question: do you remember all those identical football games that had that bloke (we think his name was Kevin Toms) on the front of every single one? This was because he wrote them. Why? **Simon**

L

Label A word or string of characters given to mark a line in an Assembly program, so that that line may be referred to by other commands. This is necessary as Assembly language does not support line numbers. **Simon**

Languages Computers don't just have to run their normal language (BASIC) you know – there are loads of different ones to try. For instance, why not try Machine Code? What about C (but that's boring), LOGO (but that's rubbish) or COBOL (get a life)? **Simon**

Least Significant Bit The right-hand digit of a binary number, signifying either one or zero. See also Most Significant Bit (surprise, surprise). **Simon**

LIFO Last In, First Out is what this stands for. What it means is another matter altogether. It's all to do with programming and the way information is stored. I'd check out this issue's Assembly Line on page 14, if I were you (because that's where Simon's done all the hard work explaining it in-depth). **Dave**

CLASSIC GAME

Laser Squad



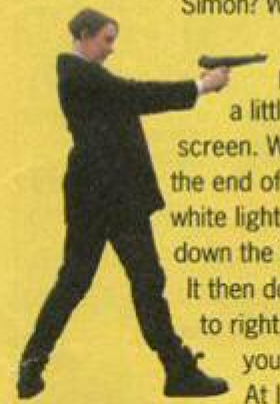
Yeeeerrrsss – with the possible exception of *Stellar Outpost* (reviewed this month), *Laser Squad* has to be about the only strategy game that normal people (*Just what are you implying here, Simon? – Dave*) are likely to enjoy. The game is all about controlling a troop of mass destruction nuts on a psycho head-case outing. What more needs to be said? We love it. **Simon**

edia Amstradica

Lawton, Rod The longest-serving editor of *AA* who started his reign with issue 51 and wandered off in a confused and bewildered state in issue 89. Famous for his beard and biting wit, he hates being asked if he's related to Bill Oddie. What's he up to now? Tune in next month for the answer to that one. And many more ones like that (he's says mysteriously and only just grammatically). **Dave**



Light Pen/Light Gun A light pen really is quite a simple device – it works in exactly the same way as a light gun. How's that, then, Simon? Well, when the button on a gun or pen is pressed, the CPC sends a little white beam down the screen. When the little sensor in the end of the pen picks up this white light, the CPC knows how far down the screen the pen is sitting. It then does the same from left to right, and works out where your pen is pointing.



At least, that's the way it would work on a rubbish light pen program. On more sophisticated bits and pieces like the light gun and a Plus, the sensor just picks up the position of the scanner beam on the monitor, therefore not needing any huge scan lines taking up valuable time, obscuring the rest of the screen and blinding the user when in dark rooms. **Simon**

CLASSIC GAME

Little Computer People The weirdest game concept ever devised on a home computer. The basic idea was to look after a little pet LCP blokey. That was it! You had control over various bits and pieces, but basically, you had this little computer person as a pet on your machine. Deeply, deeply arcane. **Simon**



Listings These are like personal challenges to some people – can they type in a whole listing correct first time? Listings of programs that readers can type in themselves have been a staple feature in computer magazines since the very first ZX80 fanzine, and they're still very popular. This is probably because the best way to learn is by example and that's why we've introduced the Workshop boxes in our Type-Ins section. It's all part of the service. **Dave**

M

Mandelbrot Benoit B Mandelbrot and a few of his mates developed fractal mathematics in the first half of this century. A fractal is a geometric figure that has broken dimensions – whatever they are – and is formed from a shape that repeats itself in an ever-decreasing pattern, determined by an on-going equation in which the answers are fed back into the equation. A Mandelbrot is just one type of fractal; another is the Julia Set which is created using a different equation which produces a completely different pattern. Look, they're pretty, swirly pictures produced by a computer, okay? **Dave**



Not a Rorschach test, but a Mandelbrot fractal.

Machine Code A language of numbers – it's the one the CPC works in, and is directly related to binary, and the electronic configuration of the processor. You see, BASIC is just a Machine Code program running on your CPC. The Machine Code used on a CPC is Z80, because that is the processor type. Machine Code is written by taking an ASCII text file called a source file (containing your program) and converting it into raw Machine Code numbers using an Assembler. **Simon**

Map a) A detailed description of the way in which a computers memory is laid out, indicating jumpblocks (in the CPC's case), screen area, system variable, etc.
b) Something magazines love placing in their games cheats sections for blatant space-filling purposes. **Simon**

Memory Memory is exactly that. It comes on RAM chips in your computer. **Simon**

Microprocessor The heart of the machine. The processor is the bit that actually does all of the maths, all of the work, and simply controls everything else inside the box. **Simon**

CLASSIC GAME

Marble Madness Though not as original as *Spindizzy* (which started the whole ball craze rolling), *Marble Madness* was the first to combine isometric rolling aboutness with a few aliens and a mission. **Simon**



MODEM Modulator/demodulator was a bit of a mouthful for describing a device that allows computers to communicate over telephone lines, so someone had the bright idea of shortening the name to MODEM. Basically, a MODEM converts computer data into data that can be sent along telephone lines and vice versa. You also need Communications (comms) software to use a MODEM; the best for the CPC is probably *HoneyTerm* from Siren Software (see Amscene Directory, page 7). **Dave**

Most Significant Bit The left-most bit of a binary byte, signifying 128 or zero. **Simon**

Music For an 8-bit computer the Amstrad has some pretty impressive musical capabilities; you only need to listen to the in-game music in *Prehistorik 2* to hear that. Other great games music on the CPC can be heard in *Cybernoid 2*, *Head Over Heels* and our covertape game this month, *Stormlord*. The CPC's sound is controlled by the AY chip which also, for some strange reason, controls the keyboard. **Dave**

Mouse The mouse is a little box which contains a ball that just pokes out underneath which you roll around your desktop to control an on-screen pointer. This makes it a very effective device when used with an art package, for example. The two main uses for a mouse on the CPC are *OCP Art Studio*, and the AMX range of software (covering art, DTP, filing, etc). The only mouse readily available for the CPC is the AMX Mouse, bundled with a software title for about £50. **Simon**



A mouse is a must with OCP Art Studio.

N

CLASSIC GAME

Nebulus Classic tower climbin', baddie smashin', platform jumpin', door enterin' game that should be on the covertape very soon. Oh – it's by Raff Cecco, surprise, surprise. **Simon**



Nicknames When the CPCs were launched, each version had a nickname:
- The CPC 464 was called Arnold, this being an anagram of Roland, the man who originally marketed the computer.
- The CPC 664 was known as IDIOT, an acronym for Insert Disk Instead Of Tape.
- The CPC 6128 was Big IDIOT. It was a bit bigger, you see
- The PCW was nicknamed Joyce after Alan Sugar's secretary. Allegedly. **Simon**

A-Z

Nibble Four bits. Half a byte. Nibble. Byte. Great joke, eh? **Dave**

O

Object Code This is the file of m/code runable numbers produced by an Assembler when it's assembling source code (the text). **Simon**

Oliver Twins



Phillip and David Oliver were probably at one time (about 10.37pm, May 20th, 1986, we reckon) the most famous programmers in the UK. They worked for CodeMasters, and, along with their bosses, Richard and David Darling (aka, The Darlings), fostered the media myth that to be a games programmer you had to be a teenage genius sibling.

They were responsible for unleashing *Dizzy* on to the world and other crimes included *Fruit Machine Simulator*. To be fair, the first two *Dizzy* games were actually pretty good, but it's hard to forgive them for the *Dizzy*'s that followed, even though they didn't write most of them.

It has to be admitted they're more renowned for quantity than quality, at one point averaging about a game a month. As Phillip once admitted in this very mag, "the more games we release, the more money we make." Other Oliver titles include *Robin Hood, Ghost Hunters, 3D Starfighter, Race Against Time* and *Jet Bike Simulator*. **Dave**

Op Codes Each number in memory has a use in Z80. &3e, for example, means 'ld a,nn'. That makes &3e an opcode. **Simon**

CLASSIC GAME

OutRun Europa While film sequels traditionally deteriorate computer games sequels seem to get better. The *OutRun* series started pretty lamely with, would you believe, *OutRun*, progressed to the much better *Turbo OutRun* and culminated in the infinitely better *OutRun Europa*, a multi-vehicle chase across Europe. Not the best driving game ever, but the the best game we could think of beginning with O. **Dave**



P

CLASSIC GAME



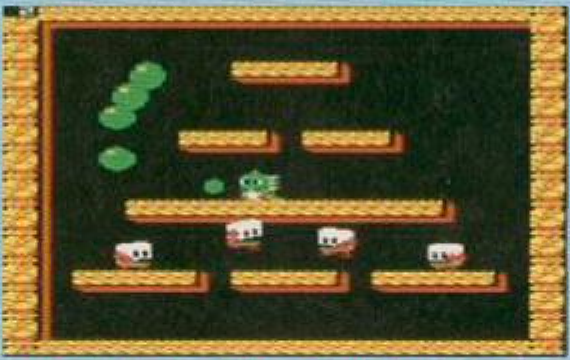
Pang Classic ball-zapping fun. The basic concept has you standing at the bottom of the screen shooting at huge bouncing balls. It's true. No, really. *Pang* is also notable, though, because a certain hard-working, long-suffering staff writer has become so addicted to it, a certain editor has had to hide the cartridge in order to get any work out of said staff writer. **Simon**

Parallax Scrolling A graphical trick designed to give the impression of depth in which the foreground scrolls from one side of the screen to the other at a faster speed than the background. **Dave**

PEEK The BASIC function to examine a single byte of memory at a specified address. **Simon**

Piracy This is the name given to the practice of copying and distributing copyrighted software illegally. Many organisations say it's killing the computer scene, and they're right – if a pirate ever whinges about the CPC scene being dead, don't have any sympathy for them – it's partly their fault. **Simon**

Pixel The smallest definable element on a screen. A dot, if you like. It's small – really small. Not quite as small as my pay packet, mind you, but getting there. **Simon**

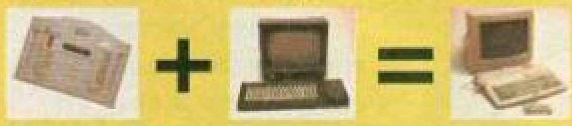


Bubble Bobble is an excellent example of the computer game sub-genre classification Platformicus Addictivitus.

Platform Games Hmmm. Tricky one this. When you know what a platform game is it's easy to spot one, but trying to define parameters is another matter. I tried asking Simon and he said they were, "2D gravity games." Well, he would. Basically they're games in which the characters leap about between platforms. They invariably involve collecting things (most often fruit) while avoiding other things. The grandaddy of all platformers is *Chuckie Egg*, which basically set down the ground rules. *AA*'s top five platformers, in no particular order, are:

1 *Chuckie Egg*
2 *Bubble Bobble*
3 *Builderland*
4 *Prince Of Persia*
5 *Nodes of Yesod* **Dave**

Plus The Plus range was a set of CPCs that had the guts of a GX4000 in the same box as the normal CPC, making them super CPCs if you like, as they were capable of running normal CPC software, but could accept carts as well. The equation below should explain matters. **Simon**



POKE Used in the same way as PEEK (almost), except this command actually alters the byte in a specified address of memory. **Simon**

Pop The Machine Code instruction to take a 16-bit number from the stack. **Simon**

CLASSIC GAME

Power Tetris The concept of two-player *Tetris* is really quite simple; every time you get two lines completed simultaneously, the other player gets an extra line added to their column. If you manage to get three lines, the other player gets two extra, and so on. **Simon**

PROM Programmable Read Only Memory – it's an EPROM that you can only program once, as you can't erase it. **Simon**

Public Domain Non-copyrighted software, written by amateur programmers who release their programs for free for the good of humanity (and for a little bit of fame/notoriety). You can legally copy PD, so in effect you can get it for free. But most people get their PD from PD libraries, who will charge a minimal duplication/distribution charge. Any form of software, from games to utilities, from tape to disk, can be PD if the author gives the okay. The European CPC scene is heavily into demos, which are programs that exist to show off the coders' skills in creating graphics and sound that stretch the CPC's capabilities to their limits. **Dave**

Push Just like pop, only this one puts a number on to the stack. **Simon**

Next Month: Q-Z (surprise, surprise)

A matter of convention

When the UK's largest user group holds a convention everybody who's anybody on the CPC scene will be there. And you'll probably find Simon Forrester hanging around as well (if he wangles his name on the guest list through a friend of a friend).

Southampton seems to be becoming the unofficial CPC capital of Britain at the minute; most of our Reaction mail and phone enquiries come from the south coast's greyest town, as do most of the UAUG people. You can put it down either to some strange arcane force dragging our readers there, or CPC fans visiting from the continent, but for whatever reason, it seems the obvious place for a CPC convention. The UAUG obviously thought so because that's where they decided to hold their second annual shindig this October.

At 1pm, I arrived at the Eastpoint Centre, a community and convention centre about 15 minutes drive out of the City Centre. I could spend a lot of time telling you all about the UAUG, but we've already done that (order issue 93 from back issues, as they're worth knowing about). But as a sort of recap it's an organisation run by CPC fans for CPC fans, and comprises of technical helplines, two PD libraries, a fanzine, and a yearly convention. The idea behind these conventions is that they're a chance for like-minded CPC fans to swap programs, tips and information, and even buy the odd thing from one of the CPC scene bods who were also there.

One quick flight of stairs later, and I was slap bang in a room full of CPCs and people. After fielding various questions about just how late *AA* was last month (it wasn't our fault!), I started chatting to all the people there – I think we'll use this page to catch up on a few of them...

Galactic Warfare part deux



Paul Gardener, and his second Galactic War...

Paul Gardener was showing off his new improved version of the strategy game, *Galactic Warfare*. Never seen the old one? That's hardly surprising. Y'see if you look back to issue 97, find our review of the game, which put it in the 'worthy but flawed' category. Well, Paul took these criticisms to heart, bless him, and actually went away to spruce up the game (which was fundamentally sound, just a bit lacking in the presentation department).

I returned from Southampton, then, with an updated version, in which Paul has not only fixed the problems mentioned in the review, but has modified several other features. The resulting game is a lot more classy and enjoyable.

From what I've seen, then, *Galactic Warfare* now scores, ooh, let's ... (*great one for suspense is our Simon – Dave*) 78 per cent.

● ***Galactic Warfare*** **can be ordered from PJ Gardener, 2 Crofton Road, North End, Portsmouth PO2 0NT.**

UAUG Peeps

What's the collective noun for UAUG organisers? Er, I know... Among the 'civilians' and Richards, you could occasionally pick out a UAUG blokey. A crafty shot with a camera when they all happened to be in a line looking in the right direction, and we have a teaspoon of UAUG organisers immortalised in print. From their point of view, the event went swimmingly, and I have to agree that from where I was standing, it was a storming success.

● The UAUG's address is in the Amscene Directory.



What amazing luck that they were all standing in a line looking the same way.

Quantum mechanics

The newest indie CPC software group on the block, Quantum Computing, was represented at the convention by Richard Wilson. So what has he been up to since the break from STS (as reported in issue 97)?

Well, he's just finished *ParaDOS*, yet another addition to the ever-increasing range of high capacity disk operating systems. If you'd like to hear a little more about it, you'll find a review on page 54 of this issue.

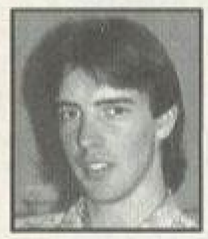
Still in the development stages are *ZACK* (which was previewed last issue), and *Amigo* (a sort of *HackIt*-style thing). These should be along pretty soon now.

Loopy Lou?

I'm sorry, but I just had to include this. If you remember in a few issues from 93 onwards, there's been the odd missive from *AA*'s very own fruit loop, namely Loopy Lou. Well, *I met her*, and she really is quite, quite insane.



What an odd little fish, and no mistake – Andy



Richard Wilson of Quantum Computing.

On the 'tell me something new' front, Richard Wilson is now developing *PCZ80*, a *Maxam*-compatible Z80 assembler that'll run on a 286 PC. From the specs Richard gave me, it looks as if it should be the answer to many a coder's prayers!

Wildey at heart

The man with a thousand sales pitches, Richard Wildey of Sentinel, was also present, armed with more arguments about the merits of *Zap'T'Balls*, and copies of all his titles to sell. There's not much new in the pipeline at the mo', apart from yet more tutorials; he's currently seeking writers for the next set, so if you're interested, please get in touch with: Sentinel Software, 41 Enmore Gardens, East Sheen, London SW14 8RF.

A clutch of coders

Don't think the convention was just full of UAUG bods and people called Richard, though – a few demo coders were there with their latest masterpieces. Pictured below are Ben Fall, aka Sorcerer from Bitmap Vandals (responsible for the *Ballmania* demo), Rob Watson, who claims to be a nobody and Keith Brindley, aka Warrior from Underground. We got a glimpse of a few of the titles to their names, amongst which was the incredibly eye-catching *Ballmania* demo (we've got a grab but it seems a shame to stick it on a black and white page so check out page 58).



L to R: Ben Fall, Rob Watson, Keith Brindley



Technical Forum

Life isn't easy. It's a hard, harsh, unforgiving world out there. But Richard Fairhurst can lift a little bit of the burden of everyday living from your weary shoulders by answering your technical CPC queries. What a hero that man is.

Blockhead

Dear Technical Forum,
1 How do you load/save BASIC programs in Machine Code?
2 When I look at the directory tracks of a disk, I notice that for each file there are 32 bytes. The first 16 bytes are used to hold the user number and filename, and the last 16 bytes contain a bunch of numbers. Do they relate to the sector and track where the file is held? If so, how?
3 Do you know if the Panasonic KX-P1180 printer supports *Stop Press*, *Protext* and *Advanced Art Studio*?
4 If I were to buy a printer here in Canada that was compatible with my CPC6128, would it work on my Amstrad, given the voltage difference? (It is 110V over here.)
5 How do you turn on the upper, lower and disk ROMs?
6 Why don't you do a feature on firmware calls for Machine Code?
Adrian Lybaek, Canada

1 First of all, load the file into memory at &170 using CAS IN DIRECT. Then, working from the file length returned by CAS IN OPEN, you need to set up the BASIC variables; remember to add &170 to the length. POKE this value into the words at (on the 464) &AE83, &AE85, &AE87 and &AE89: on BASIC 1.1 machines, try &AE66, &AE68, &AE6A and &AE6C. Saving BASIC programs is easy enough if you know the length, which you can find from the first one of these variables; remember to use the right filetype (0 for BASIC programs).
2 You're right in that they relate to where the file is held on the disk. In fact, they describe on which 'blocks' the file is located. On a standard Data or CP/M disk, each block is 1K (this is why file sizes are described in 1K units, rather than 0.5K or anything else), ie, two sectors – numbered sequentially from the directory sectors themselves. If you're using a large-capacity (eg, ROMDOS, S-DOS) format, the blocks are likely to be larger: for example, ROMDOS D20 format has 2K blocks.
3 Should do. Before you buy a printer, check that it is fully 9-pin Epson-compatible; try to get a written undertaking from the shop that it is. If it doesn't work because it's not compatible, don't come crying to us.
4 The 110V power supply makes no difference to the printer signals; the printer port works on a 5V basis. So, yes, it will work on your CPC.
5 To turn on the lower ROM, CALL &B906; to disable it, CALL &B909. 'The upper ROM' is a misleading term, because BASIC is just one of many 'upper ROMs' – AMSDOS, *Maxam*, *Rodos* and so on are others. BASIC is almost invariably in slot 0, and AMSDOS (the disk ROM) in slot 7. To select an upper ROM, load C with the slot number, and CALL &B90F; you can then CALL &B900 to enable this ROM, and CALL &B903 to disable.
6 Firmware calls are an essential part of programming the CPC in Machine Code, so Simon's covering them as a matter of course in his Assembly Line series. If you can't wait until he gets on to a specific topic, by all means write to Techy Forum and ask away. **Richard**

Wrong connection

Dear Techy Forum,
I have just bought a dk'Tronics 64K memory expansion unit, and *Advanced Art Studio* with a dk'Tronics mouse interface. I also have a

Go on, give it some stick

Dear Techy Forum,
I am currently working on my GCSE Technology project to design and produce an electronic device that will enable the user to control applications loaded on to the computer via the joystick port. It will work in a similar way to a joystick but as I don't know all that much about how joysticks work I thought I'd ask you a few questions.
1 I opened up a joystick and found in it a mass of wires, resistors and micro-switches. What do all these bits actually do?
2 Do you have to use micro-switches or will any type of switch do (eg, pressure pads)?
3 How do you connect the wires to the joystick port and what does each pin do?



PIN 1	UP	PIN 6	FIRE 2
PIN 2	DOWN	PIN 7	FIRE 1
PIN 3	LEFT	PIN 8	COMMON
PIN 4	RIGHT	PIN 9	COM 2
PIN 5	SPARE		

It's a totally different kind of pin art altogether. ("It's totally different kind of pin art" – the entire AA crew in unison)



Joysticks came in all shapes and sizes but they all work in basically the same way.

4 How does the computer understand the input coming from the joystick?
I would be extremely grateful if you could answer my questions, as you seem like the only person who might be able to help me complete my project, otherwise it'll be back to the drawing board for me. *Brian Meenagh, County Tyrone*

1 Now that's a general question if ever I heard one. Actually, a joystick is an extremely simple circuit indeed. The computer supplies a voltage to the joystick on the 'Common' pin. This voltage is routed through all the switches – one for up, one for down, one for each fire button, etc – in parallel, and the resulting current from each switch directed to the appropriate pin on the connector.
2 Any switch will do – as long as you wire it up correctly.
3 Check out the handy accompanying diagram which our Art Ed, Andy O, whipped up for your delight and delectation in a frenzy of technical drawing passion (it just comes over him sometimes).
4 The joystick is connected to the keyboard matrix, just like any other key. The keyboard (and, hence, joystick) is processed using the AY-3-8912 sound chip, which in turn is controlled by the PPI 8255 peripheral controller.

What all this means in plain English is that you can read the results of the signal coming in at the joystick port by using functions which operate in a similar way to the keyboard ones. You can use INKEY and INKEY$ just as you would for the keyboard: check the keyboard diagram in the back of the CPC's user guide. Alternatively, there is a function JOY(n), where n is the joystick being scanned (0 or 1 – to use two joysticks requires a bit of extra circuitry), which returns a different value for each combination of joystick movements.

Good luck with your project. **Richard**

DDI-1 disk drive which works well with my CPC 464. However, since plugging in the expansion unit and mouse interface unit, the 464 no longer senses the disk drive being attached, and when loading from disk tells me to 'Press PLAY then any key'. I have tried IDISC but with no success, so I am reduced to unplugging the two interface units and plugging in the disk drive on its own. As you can see (*er, not really – Richard*) I am using the *Mini Office 2* disk version word-processor to type this letter to you.
GC Charge, Huntingdon

If something like this happens, it's virtually a certainty that you've got expansion connector problems; basically, a faulty connection between the edge-connector on one unit and the connector on another is preventing the information from getting through. The dk'Tronics units, in particular, are notorious for causing problems when attached to the back of machines: instead of the usual method of making sure that the connectors are the right size and no bigger, they use an awkward 'polarising key' (a small piece of plastic which fits into a slot on most edge connectors).

What can you do about it? One method I find frequently helps is to plug all the units in together, but don't push the connectors fully on to each other. If that's no good, you'll need to clean the edge connectors. The safest method is to use a hard ink rubber on each unit, including your 464; if you can find a model railway shop nearby, a Peco track rubber is designed for very similar purposes and will act admirably. **Richard**



La-la-laah, luh-luh-luh-laah, laa-laa-laah, luh-la-la-laaah... ah, any excuse for a Banana Splits pic, no matter how tenuous the link...

The splits

Dear Techy Forum,
I have a 6128 computer with a colour monitor. Could you tell me how I could get two joysticks to plug into the computer, as there is only one socket? Also, the children have damaged one of the master disks. Where can I get another one?
Harper Dickson, County Down

To plug two joysticks in, you need a joystick splitter. This should only cost you a few pounds, and is available from mail order suppliers such as OJ Software. If you really need a master disk (it's only got CP/M on, so there's no great loss), try WAVE – a while ago they were even selling them off as blank disks. **Richard**

DuMPed

Knowing that the CPC is a great machine and is capable of a good deal more than just gameplay, I purchased a copy of *Protext*, only to find that my DMP-1 printer would not work in any of the other fonts. I know there is a facility in *Protext* to alter the printer codes to allow me to use this package. Now we come to the problem: I no longer have a copy of the printer manual which gives the codes. Contact has been made with the Amstrad User Helpline, only to find that the manual is no longer in print and my printer is obsolete.
G Steel, Barnsley

A quick history lesson for those of you who've never heard of this beast: before the well-known and successful DMP-2000 and 3000 series, Amstrad brought out a printer called the DMP-1. Unlike the 2000, this was Epson-incompatible, which leads to all these problems.

It's not the first letter we've received on this subject. So here's a plea: if anyone out there has a DMP-1 manual to lend Techy Forum for a couple of days, please send it to the usual address (it'll be returned, naturally). In this way, not only can we help Mr Steel and others in the same predicament, but hopefully enable future versions of software to support Amstrad's first printer: as soon as a copy's received, I promise to have a go at persuading my very own *PowerPage* to support the DMP-1 as a few people have requested. Deal? **Richard**

Top Tips

Screen design

Dear Techy Forum,
I have found a way of transferring the *Screen Designer* program to disk from the AA96 covertape. Load up *JL-COPY* from covertape 22. Select option 1: filecopy. Set the input to tape and the output to disk, and press ENTER to copy. You are now prompted for a source filename: type SCRD and press ENTER. Leave the destination filename the same if you wish and press ENTER.

You will now see 'Press PLAY then any key'. Rewind tape 30 to the beginning of the *Screen Designer* program, play the tape, and press a key. When the program has been loaded, insert the disk which you want the *Screen Designer* program to be saved on to, and press a key. Hey presto, *Screen Designer* on disk.
Jonathan Brumhead, Stockport

Pretty detailed instructions there. Thanks. **Richard**

Ripper!

Dear Techy Forum,
Here is a Top Tip especially for Plus owners. If you have a CPC Plus and Logon System's wonderful PD program *B-ASIC*, then it is very easy to extract the hardware sprites from *Burnin' Rubber* if you know how. First reset the computer, and press f2 to enter *Burnin' Rubber*. Don't press anything, simply wait five seconds and then hold down CTRL, SHIFT and ESC. Then press f1 to enter normal BASIC, and type the following with your *B-ASIC* disk in the drive:

64k owners: `MEMORY &9CFF: LOAD"LOGON BAS.COD": CALL &9D00`

128k owners: `OUT &7F00,&C1: LOAD"COD", &C000: CALL &C2B5`

This loads *B-ASIC*. Now type in the following short program to display the sprites:

```
10 DIM x(16),y(16): CLS
20 FOR n=0 TO 15:|INKS,n,n:NEXT
30 FOR n=0 to 11: READ x(n),y(n): |SPRZO
OM,n,3,1
40 |SPRXY,n,x(n),y(n): |SPRON,n: NEXT
50 DATA 2,30,60,30,0,14,64,14,6,1,70,5,1
16,29,179,29,115,13,179,13,121,0,184,4
```

You'll need to muck around with the inks to get the appropriate colours. You can also reset during a game, but you will have to figure out where to put the sections to build up the car sprite. It may be possible to do the same with other cartridge games if you switch the cartridges quickly enough before the memory is lost. Remember that the sprites are copyrighted!
Rob Watson, Ely

Nifty stuff. By the way, the instructions for loading don't necessarily apply to all versions of B-ASIC; check the program's documentation! **Richard**



TIP OF THE MONTH: It had to happen. We've tried to deny its claim to this title too long now. But finally, the Matterhorn receives the accolade it was always destined to have.

Crash-proof

Dear Techy Forum,
When you use *Advanced Art Studio*, and it crashes for some reason, don't despair: your artwork isn't lost! Just type:

```
MEMORY &3FFF: OUT &7F00,&C5: SAVE"filena
me",b,&4000,&4000: OUT &7F00,&C0
```

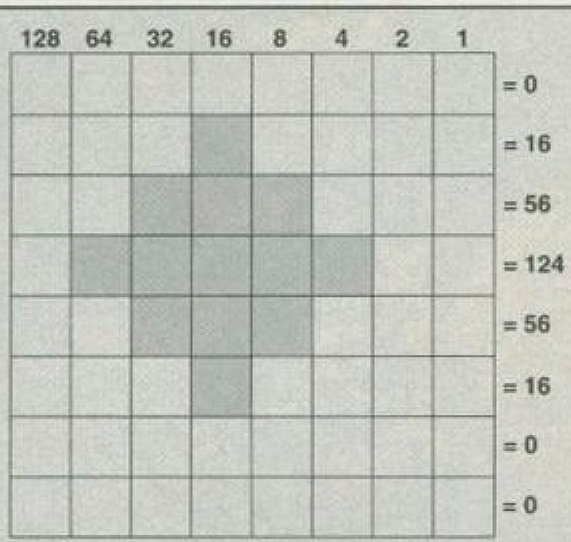
Secondly, HIMEM is stored at &AE5E (low byte first, high byte second, of course). Instead of using LD A,0, use XOR A; it saves three T-states. Use ADD A instead of SLA A; it's twice as quick and the only difference is the effect on the flags. Also, use CPL instead of XOR 255.
Adrian Lybaek, Canada

Symbolicity

I want to use the SYMBOL command to create characters to use in my computer games, but I cannot understand the explanation given in my Amstrad manual. Could you help?
Cameron Barr, West Lothian

Okay. First of all, draw a square grid on a piece of paper, eight columns high and eight columns wide. Now write 128 over the top of the first column, 64 over the next, then 32, then 16, 8, 4, 2 and finally 1.

Design your character in this by filling in boxes on the grid. When you've finished this, you need to work out a value for each row. You calculate it by adding together the values of all the filled-in boxes in that row. Sounds



How to design characters using the SYMBOL command (and we don't want any psychological analyses of the shape we've chosen, thank you very much).

complicated? Not really, check out the accompanying diagram. You should end up with eight numbers, one for each row.

You can now decide which 'character' you are going to set to this design. Usually you can set characters between 240 and 255, but if (for example) you type `SYMBOL AFTER 224` first, you can set characters between 224 and 255. This also resets these characters to their standard designs, but don't worry, you only need to do it once (to print a character, just use `PRINT CHR$(227);` for character 227, and so on.)

Let's say you've decided on character 229. To set that character, make sure that you've entered `SYMBOL AFTER 229` (at the start of the program). Now type `SYMBOL 229`, followed by each number. Separate the numbers with commas. Bingo: your own design is ready to use! **Richard**

De doo da DAA

Dear Techy Forum,
What do the Assembly language instructions `RRD`, `RLD` and `DAA` do? I imagine that the first two are 'rotate' instructions, but I don't know how they work, and the third has me stumped completely. Any clues?
Ted Hull, Chipping Ongar

They are, in fact, rather cunning number-handling instructions. Say you're writing a game which has the player's energy level varying between 0 and 99; you can store the value straight into a byte somewhere, but when it comes to printing the number out, you have to do a 'divide by 10' process to get the first digit, and then print the remainder. Not fun, and not quick.

This is where these instructions come in. They perform a system known as 'binary coded decimal', which stores each digit in a nibble (four bits) of the byte. This is surprisingly simple; it just means that if a byte contains the hexadecimal number `&78`, in binary coded decimal, it contains 78 decimal.

All well and good, but what can you do with this system? Well, `DAA` is a 'fix' after addition and subtraction to make sure the value stays in binary coded decimal, or BCD for short. If we take the `&78` (78 in BCD) from above, and add `&13` (13 in BCD) using `ADD &13`, the usual result is `&8B` – not very useful, because we want 78+13, 91. So, immediately after the `ADD`, perform a `DAA`. This will make sure, very cleverly, that the answer is `&91`.

Two instructions left. If `A` contains our friend `&78`, and `HL` points to a byte containing `&36`, then try an `RRD`. It changes `A` to `&76` and `HL` to `&83`; `HL`'s higher nibble has been put into its lower nibble, the original value of which has been put into `A`'s lower nibble, and the original value of that has been placed into `HL`'s higher nibble, completing the triangle. As you can see, the higher nibble of `A` is unused. `RLD` just goes the other way.

And the abbreviations? Rotate Left Decimal, Rotate Right Decimal and Decimal Accumulator Adjust. Catchy names, huh? **Richard**

The `HIMEM` address is only valid for 664s, 6128s and Pluses; use `&AE7B` on 464s. Thanks for the *AAS* tip (just in case anybody missed it in our 'Easy Street' feature last issue). **Richard**

Protext for pros

Chances are that a lot of people preparing on-disk documentation will be using *Protext* to create the text files. Usually, you have the hassle of saving in ASCII format, which strips out all the formatting, justification spaces and other frills you've put in. However, you can avoid all this hassle in Machine Code by directly reading the *Protext* file.

When opened, you'll notice that the file's not a standard ASCII file (filetype &16). Don't worry about this (for various safety reasons, *Protext* likes to give its files non-standard filetypes – this doesn't really do much good, however, as BASIC can still read them in perfectly well), but simply read in characters one-by-one as per usual using `&BC80`. If carry is set on return, then it's the end of the file.

Otherwise, you need to call a short conversion subroutine. If A contains `&8A`, change that to `32`; if it contains `&90`, then change it to `10`. You may also want to put a short routine in to ignore the whole line (terminating with character `10`) if it begins with a '>', for an embedded command. Then just print the (perhaps converted) character.

This won't cope with tabs or printer codes, but you shouldn't find this too much of a bind. It certainly removes the annoyance of justification-produced 'soft' spaces being converted into proper ones next time you edit the file.

Printer problems # 836

Dear Techy Forum,
I have a CPC 6128 and I have just purchased a Panasonic KX-P1123 printer. I am having trouble printing out using the *Tasword* word-processor I got with your magazine (*AA*91). When I print out, unless the line goes fully from the left margin to the right margin, it centres the line. It shows fully justified on the screen. The only way to stop this happening is to put a full stop on the right margin, which does not look right. I hope you can help me as *Tasword* is a good word-processor. I enclose an SAE for your answer.
RE Deakins, Cleethorpes
PS By the way, the word-processor on *Mini Office 2* works okay.

For the umpteenth time – no SAEs. *AA* is a magazine, not a charity. None of us have the time to reply personally to everyone who writes in. Save yourself a few pennies.

It sounds like your printer is trying to be a bit too clever. If a line is justified, it will always be the same number of columns as another line, typically 80. This means that when centred, it will appear in the same place (horizontally) on the page as another line, because they're both the same width.

The last line of a paragraph, though, is never justified: this makes it a different length, so it centres to a different place. The problem isn't *Tasword*, it's that your printer has got its Centre setting on. You may be able to fiddle around with the small DIP switches to reverse this setting, or you may need to send a command to the printer in the form `PRINT#8` codes to achieve this. Read your printer manual for details.

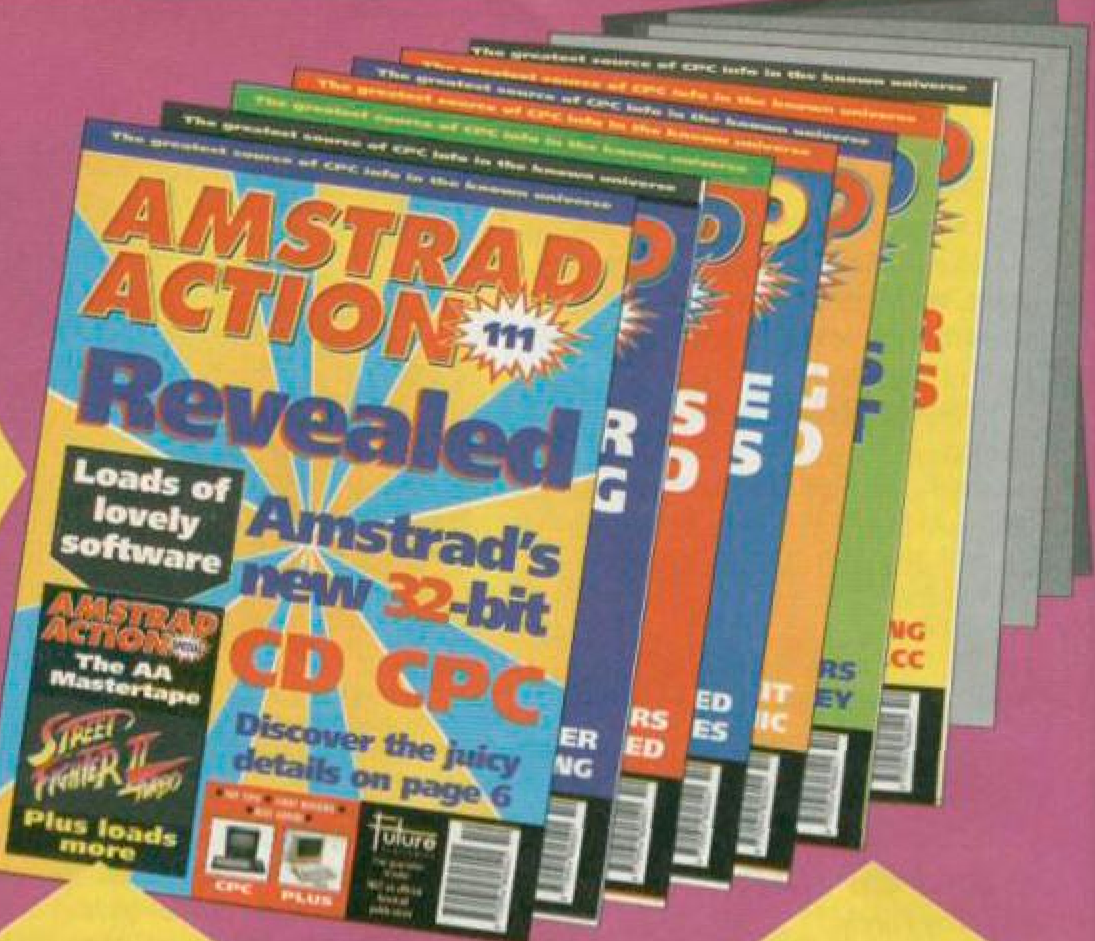
One point is left: why doesn't *Mini Office 2* have this problem? The short answer is that *Mini Office 2*'s word-processor is a load of rubbish, but that's not very helpful. In fact, *Mini Office* stores all lines as the same length: even if a line finishes halfway along the page, it fills up the remaining characters with spaces, so centring has no visible effect. *Tasword*, on the other hand, can cope with lines of varying length – hence your problem. **Richard**

In a bit of a fix?



Don't get hot under the collar – no matter how bad things get Technical Forum can help you out of any jam. So send your CPC queries to:
Technical Forum,
Amstrad Action,
30 Monmouth Street,
Bath, Avon, BA1 2BW.

You never know, it could happen... So make sure you're here if it does.



If it's happening in the CPC scene you'll hear about it first in Amstrad Action. So if you've got a CPC then Amstrad Action is an essential monthly purchase. And the best way to make sure you never miss a copy is to subscribe.

- Your copy of AA is delivered direct to you every month. No fuss, no bother.
- It's cheaper than buying from the shops because for each year's subscription you get two issues free.
- And don't forget that every month with Amstrad Action there's a cover tape packed with great games and superb utilities.
- So what are you waiting for? Subscribe to Amstrad Action now and live a hassle-free 12 months. You never know, it could change your life (probably).

2 FREE ISSUES!

Let's say these two issues for the sake of argument. Y'see when you subscribe to a year's worth of Amstrad Action you only have to pay for 10 issues. Or, in other (bigger) words:

12 issues for the price of 10!

It's a barg' of epic proportions.

YOUR NO-QUIBBLE, NO-RISK GUARANTEE

You can cancel your subscription at any time in the future and we will refund you in full for all unmailed issues.

You just can't lose out!

GUARANTEED

SUBSCRIBE TO AMSTRAD ACTION NOW!

Yes! Please enter/renew my subscription to Amstrad Action at the all inclusive price of

12 ISSUES ☐ **UK £29.50** ☐ **EUROPE £47.25** ☐ **REST OF WORLD £63.10**

To ensure you receive your magazine and tape quickly and undamaged, all overseas subscriptions are sent Air Mail

If you are an existing subscriber please quote your subscription reference number here – you will find this on your address label ____________

MY METHOD OF PAYMENT IS *TICK YOUR CHOICE* **TOTAL PAYMENT £** ____________

☐ **VISA** ☐ **ACCESS** CARD NO ☐☐☐☐ ☐☐☐☐ ☐☐☐☐ ☐☐☐☐ EXPS ☐☐☐☐ ☐ CHEQUE *payable to Future Publishing Ltd*

NAME ____________ SIGNATURE ____________

ADDRESS ____________

____________ POST CODE ____________

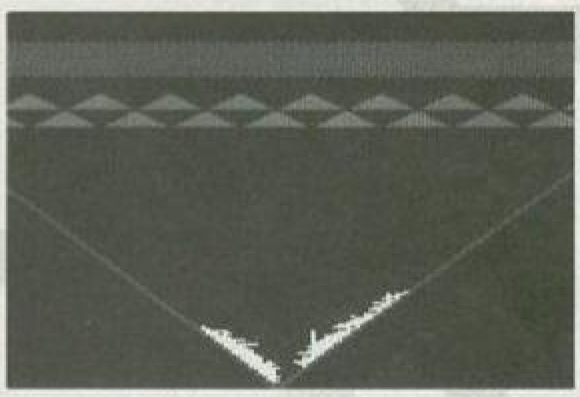
Enclose this coupon (together with your cheque if applicable) in an envelope and send to: AMSTRAD ACTION SUBSCRIPTIONS, FREEPOST, SOMERTON, TA11 7BR.
YOUR SUBSCRIPTION WILL BE PROCESSED IMMEDIATELY. THIS COUPON IS VALID UNTIL 31ST DECEMBER 1993 AA/MAG/1293

Type-Ins

And unto the Hairy One they went and they did day, "Oh Simon, give us something to type in!" And lo, he did.

As yet untitled...

First up this month we have quite a novel little program that has absolutely no practical use at all; it is just a greaty little demo that's intriguing and incredibly good fun to watch:



You can sit for absolutely ages just staring at all the little grains of sand moving about.

```
DAPI 10·MEMORY·19999
CBFC 20·FOR·a=0·TO·15:READ·c:INK·a,c:NEXT:DAT
     A·0,25,2,5,7,11,15,14,12,3,8,9,10,17,23,
     26
LAJH 30·BORDER·0:INK·0,0:INK·1,25:PAPER·0:PEN
     ·1:MODE·1
OALE 40·PRINT·"·--The·(I·can't·think·of·a·nam
     e)·Demo·--"
CACB 50·PRINT
PAGC 60·PRINT·"Public·Domian·by·Mark·Stewart·
     1992/1993."
CAEB 70·PRINT
EEBA 80·PRINT·"While·this·program·has·been·re
     leased····into·the·public·domian,·you·ma
     y·NOT·····include·any·of·the·code·in·you
     r·own·(or·anyone·elses)·program·without·
     prior·····written·permission·from·me."
PALA 90·PRINT·:PRINT·"Please·do·not·alter·thi
     s·code!"
CAOD 100·PRINT
DEMM 110·PRINT·"The·machine·code·used·in·this
     ·demo'·may·soon·be·used·to·create·a·game
     .··However·I·was·never·the·worlds·most·i
     maginative·person;·so·any·ideas·for·it·w
     ould·be····very·gratefully·recived."
CAAE 120·PRINT
IAOF 130·PRINT·"Mark·Stewart·1993."
CANO 140·GOSUB·350
CALC 150·MODE·0
BANO 160·PEN·3
DADC 170·LOCATE·1,6
DAGN 180·FOR·a=1·TO·40
EANI 190·PRINT·CHR$(207);
BABP 200·NEXT
CAAE 210·PRINT
DAOM 220·FOR·a=1·TO·10
IAEC 230·PRINT·CHR$(214);CHR$(215);:NEXT
DAAN 240·FOR·a=1·TO·10
GANK 250·PRINT·CHR$(215);CHR$(214);
BAHP 260·NEXT
GAGD 270·MOVE·0,257:DRAWR·640,0,0
OABO 280·PLOT·635,258,0:MOVE·0,0:DRAWR·0,400,
     6:MOVE·638,0:DRAWR·0,400,6
CAJG 290·don=0
FAID 300·AFTER·900·GOSUB·730
ECOK 310·IF·don<255·THEN·b=49152+RND*(80):LET
     ·ad=25000+(don*4):POKE·ad,(b-256*INT·(b/
     256)):POKE·ad+1,INT·(b/256):POKE·ad+2,25
     5:don=don+1:POKE·24999,don
CADO 320·CALL·20000
CADK 330·GOTO·310
BANP 340·STOP
CAMK 350·ad=20000
DAEN 360·FOR·a=0·TO·21
CAOH 370·tot=0
CANH 380·READ·b$
DAOK 390·FOR·b=0·TO·9
FACE 400·c$=MID$(b$,(b*2)+1,2)
DAFM 410·c=VAL·("&"+c$)
DAJF 420·POKE·ad,c
EAAD 430·tot=tot+c
CALN 440·ad=ad+1
CAKH 450·NEXT·b
DAKE 460·READ·che$
FAAA 470·ch=VAL·("&"+che$)
CBIB 480·IF·tot<>ch·THEN·PRINT·"Error·in·data
     ;·line:";(a*10)+510:STOP
CANH 490·NEXT·a
CAFJ 500·RETURN
HAIG 510·DATA·DD21A861DD46FFDD6E00,574
HAMD 520·DATA·DD6601DD5602CB42C261,4A9
HALF 530·DATA·4EC3434EDD23DD23DD23,4A2
HAGH 540·DATA·DD2310E5C9E5CD26BC7E,5D0
HAIJ 550·DATA·F655FE55C2B54ECBFEDD,709
HADC 560·DATA·7500DD7401DD360200E1,3BD
HAAK 570·DATA·CBBEC3384EE5CD26BC7E,5E4
HAPL 580·DATA·F6AAFEAAC29A4ECBF6DD,790
HACF 590·DATA·7500DD7401DD3602FFE1,4BC
HAMH 600·DATA·CBB6C3384E237EF6AAFE,609
HAFJ 610·DATA·AAC2EB4ECBF6DD7500DD,695
HAOG 620·DATA·7401DD3602FFE1CBBEC3,5B6
HAJE 630·DATA·384E237EF655FE55C2D0,557
HAPH 640·DATA·4ECBFEDD7500DD7401DD,598
HAGD 650·DATA·360200E1CBB6C3384E2B,40E
HADL 660·DATA·7EF6AAFEAAC27F4ECBF6,716
HAIF 670·DATA·DD7500DD7401DD3602FF,4B8
HADI 680·DATA·E1CBBEC3384E2B7EF655,5A7
HAHK 690·DATA·FE55C2EF4ECBFEDD7500,66D
HAHE 700·DATA·DD7401DD360200E1CBB6,4C9
HAOE 710·DATA·C3384EE1C3384EE1C338,54F
GABH 720·DATA·4E00000000000000000,4E
NAFA 730·MOVE·0,241:DRAWR·640,0,0:AFTER·400·G
     OSUB·740:RETURN
NBIO 740·MOVE·0,241:DRAW·320,3,9:MOVER·0,-2:D
     RAW·0,239,9:MOVE·320,3:DRAW·640,241,9:MO
     VE·320,1:DRAW·640,239,9:AFTER·800·GOSUB·
     750:RETURN
NBFP 750·MOVE·300,0:DRAWR·100,0,0:MOVE·300,2:
     DRAWR·100,0,0:MOVE·300,4:DRAWR·100,0,0:M
     OVE·300,6:DRAWR·100,0,0:AFTER·350·GOSUB·
     760:RETURN
NBFJ 760·MOVE·0,241:DRAW·320,3,0:MOVER·0,-2:D
     RAW·0,239,0:MOVE·320,3:DRAW·640,241,0:MO
     VE·320,1:DRAW·640,239,0:AFTER·50·GOSUB·7
     70:RETURN
GBLL 770·PEN·3:LOCATE·15,16:FOR·a=1·TO·3:PRIN
     T·CHR$·(212);CHR$·(213);:NEXT:AFTER·75·G
     OSUB·780:RETURN
MAEG 780·PEN·11:LOCATE·15,17:PRINT·CHR$·(215)
     ;"····";CHR$·(214)
EBKG 790·PEN·12:LOCATE·15,18:PRINT·CHR$·(213)
     ;CHR$·(215):LOCATE·19,18:PRINT·CHR$(214)
     ;CHR$(212)
JBFG 800·PEN·13:LOCATE·16,19:PRINT·CHR$·(143)
     ;"··";CHR$·(143):LOCATE·16,20:PRINT·CHR$
     (213);CHR$(143);CHR$(143);CHR$(212)
FAND 810·AFTER·250·GOSUB·830
CAKJ 820·RETURN
DBEE 830·LOCATE·15,16:PRINT·"······";:MOVE·63
     8,0:DRAWR·0,400,6:AFTER·150·GOSUB·840:RE
     TURN
CBHE 840·PEN·9:LOCATE·17,20:PRINT·CHR$·(207);
     CHR$·(207);:AFTER·100·GOSUB·850:RETURN
KCBN 850·PEN·4:LOCATE·16,22:PRINT·CHR$·(143);
     "··";CHR$·(143):LOCATE·16,23:PRINT·CHR$·
     (143);"··";CHR$·(143):LOCATE·16,24:PRINT
     ·CHR$·(143);CHR$·(143);CHR$·(143);CHR$·(
     143);:AFTER·150·GOSUB·860:RETURN
NAAB 860·LOCATE·17,24:PRINT·"··";:AFTER·230·G
     OSUB·870:RETURN
IAME 870·CLS:AFTER·50·GOSUB·880:RETURN
DANA 880·MOVE·50,50
JAJE 890·DRAWR·100,100:MOVER·3,0:DRAWR·100,10
     0
DCDN 900·MOVE·54,50:DRAWR·100,100:MOVER·3,0:D
     RAWR·100,100:MOVE·250,50:DRAWR·-100,100:
     MOVER·-3,0:DRAWR·-100,100:MOVE·245,50:DR
     AWR·-100,100:MOVER·-2,0:DRAWR·-100,100
FADN 910·MOVE·50,50:DRAWR·204,0
FAOD 920·AFTER·400·GOSUB·940
CAMJ 930·RETURN
IAOH 940·MOVE·150,145:DRAWR·0,20,0:RETURN
```

Line 20

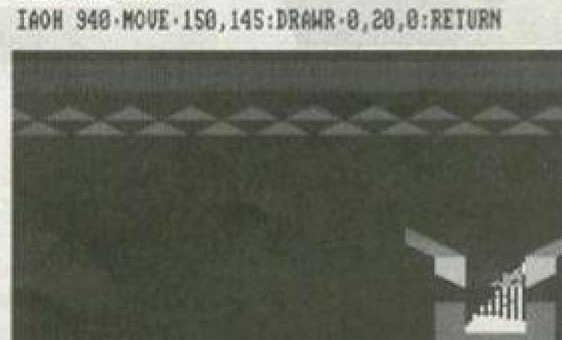
There are quite a few programs sent in by people who've set up the inks they plan to use with 16 INK commands. This is pointless, when you can read the ink values off as data. It's really quite simple.

If you look at the line, you can see a FOR/NEXT loop running through the pen values from 0 to 15. Next, the READ command reads an ink value from the DATA statement and places it in c. The loop is completed after the command INK a,c has been executed.

As far as the relative merits of using this method are concerned, it doesn't really make an atom of difference, but you might find it easier to change the ink values this way.

Line 510

Machine Code loaders are a very simple little breed of routines that we'll be looking into in more depth next month. But for now, try and work out what this one's doing, reading a continuous string of about 10 bytes or so, and then splitting them up. You can find the actual routine at lines 350 to 490, so it might be a good idea to try and follow the process command by command – good luck!



I myself lost several days to a few grains of computer generated sand – bizarre!

Areas

This one comes courtesy of David Simpson of Yorkshire (*Ilkley Moor by tat – Dave*), and will calculate areas of just about every shape you're likely to come across this side of A-level maths. It also copes with loads of different measurement units (I'm not sure on this, but wouldn't that work anyway?). As if this wasn't enough, there's also a built in conversion table, so get typing!

```
BBJK 10·REM·do·not·change·this·program·in·any·way·please
HALA 20·'Areas·by·D.Simpson
NAMI 30·'Copyright·(c)·Simpson's·Software·(1993)
BALP 40·MODE·2
BAHG 50·CLS
```

Lines 60-80

If you're wondering why I've highlighted these lines, the answer is simple; these commands demonstrate how both LOCATE and PRINT commands can be used only to apply to a specific window, by way of placing the window number, preceded by a hash (#), at the front of the parameter set. This means that, in line 70, the LOCATE command is referring specifically to window #2, as opposed to the normal screen.

```
GAIC 60·PRINT·#2,CHR$(22);CHR$(1)
IADE 70·LOCATE·#2,38,4:PRINT·#2,"Areas"
IADD 80·LOCATE·#2,38,4:PRINT·#2,"_____"
LABE 90·LOCATE·34,6:PRINT·"by·David·Simpson"
IAEL 100·LOCATE·30,10:PRINT·"1.··Square"
IAIJ 110·LOCATE·30,11:PRINT·"2.··Circle"
OAFD 120·LOCATE·30,12:PRINT·"3.··Right-angled·Triangle"
LAPI 130·LOCATE·30,13:PRINT·"4.··Parallelogram"
HAOM 140·LOCATE·30,14:PRINT·"5.··Cube"
IAIK 150·LOCATE·30,15:PRINT·"6.··Cuboid"
IAML 160·LOCATE·30,16:PRINT·"7.··Sphere"
JACJ 170·LOCATE·30,17:PRINT·"8.··Cylinder"
NAMB 180·LOCATE·30,18:PRINT·"9.··Conversion·tables"
CBDG 190·LOCATE·25,24:PRINT·"Enter·number·at·begining·of·option"
GAKD 200·A$=INKEY$:A$=UPPER$(A$)
IAKD 210·A$="":WHILE·A$="":A$=INKEY$:WEND
EAOH 220·IF·A$="1"·THEN·320
EAFI 230·IF·A$="2"·THEN·460
EAEI 240·IF·A$="3"·THEN·700
EAAJ 250·IF·A$="4"·THEN·890
EAHL 260·IF·A$="5"·THEN·1050
EAIL 270·IF·A$="6"·THEN·1220
EAML 280·IF·A$="7"·THEN·1420
EACM 290·IF·A$="8"·THEN·1640
EALL 300·IF·A$="9"·THEN·1910
EAGJ 310·IF·A$·<>·""·THEN·10
BAHJ 320·CLS
```

Lines 200-220

Here's another technique that might be new to a few of you – keypress reading. First of all, you can see a standard INKEY$ command, but with the addition of 'a$=UPPER$(a$)', the key pressed will be converted into upper case, so that lines like 220 only have to check for a capital letter (were it a letter as opposed to a number) as opposed to a letter in both upper and lower case.

```
CANC 330·MODE·2
IAMO 340·LOCATE·1,2:PRINT·"Equation·:"
NAFA 350·LOCATE·1,4:PRINT·"·Area·-·length·x·height"
MAHP 360·LOCATE·1,6:PRINT·"·Perimeter·-·4·x·length"
DBEJ 370·PLOT·250,250:DRAW·350,250:DRAW·350,350:DRAW·250,350:DRAW·250,250:MOVE·300,300:FILL·1
PAJL 380·LOCATE·1,14:INPUT·"Enter·the·length·of·a·side·-·",a
CBCB 390·LOCATE·1,16:INPUT·"Enter·the·units·of·measurement·-·",b$
DAKN 400·c=a*a:d=4*a
FAEP 410·SYMBOL·252,24,36,8,16,60
KALP 420·LOCATE·1,19:PRINT·"Perimeter·=·",d;b$
LAGI 430·LOCATE·1,21:PRINT·"Area······=·",c;b$;CHR$(252)
MAHG 440·LOCATE·25,24:PRINT·"Press·a·key·for·MENU"
HAPF 450·IF·INKEY$=""·THEN·450·ELSE·10
BAMJ 460·CLS
CACD 470·MODE·2
DAGP 480·ORIGIN·300,300
BANI 490·DEG
CANM 500·MOVE·0,50
FAEO 510·FOR·a=0·TO·360·STEP·10
GACI 520·DRAW·50*SIN(a),50*COS(a)
BAHP 530·NEXT
EAOE 540·MOVE·0,0:FILL·1
HAPN 550·SYMBOL·254,0,0,128,126,109,108,108
FAKP 560·SYMBOL·252,24,36,8,16,60
JAEF 570·LOCATE·1,2:PRINT·"Equations·-"
MAGJ 580·LOCATE·1,4:PRINT·"·Area·-·";CHR$(254);"r";CHR$(252)
OAKB 590·LOCATE·1,6:PRINT·"·Perimeter·-·";CHR$(254);"d···or·"
KAIF 600·LOCATE·1,7:PRINT·"···············2";CHR$(254);"r"
JAHB 610·LOCATE·1,10:PRINT·"Take·Pi·as·-"
FAPM 620·LOCATE·1,11:PRINT·PI
MACI 630·LOCATE·1,14:INPUT·"Enter·the·radius·-·",a
CBAB 640·LOCATE·1,16:INPUT·"Enter·the·units·of·measurement·-·",b$
FAFG 650·c=PI*a*a:d=2*PI*a
LABA 660·LOCATE·1,19:PRINT·"Perimeter·=·",d;b$
LAMI 670·LOCATE·1,21:PRINT·"Area······=·",c;b$;CHR$(252)
MANG 680·LOCATE·25,24:PRINT·"Press·a·key·for·MENU"
HALG 690·IF·INKEY$=""·THEN·690·ELSE·10
BAJJ 700·CLS
CAPC 710·MODE·2
ABML 720·PLOT·250,250:DRAW·450,250:DRAW·450,400:DRAW·250,250:MOVE·260,255:FILL·1
JACF 730·LOCATE·1,2:PRINT·"Equations·-"
GANF 740·PRINT·#2,CHR$(22);CHR$(1)
OALA 750·LOCATE·#2,1,4:PRINT·#2,"·Area·-·length·x·height"
NAKO 760·LOCATE·#2,1,4:PRINT·#2,"·Area·-·_______________"
IAFC 770·LOCATE·1,5:PRINT·······"···············2"
ABIG 780·LOCATE·1,7:PRINT·"·Perimeter·-·Add·length·of·three"
MAAM 790·LOCATE·1,8:PRINT·"··············sides·together."
PAHC 800·LOCATE·1,10:INPUT·"Enter·the·length·of·base·-·",a
MADH 810·LOCATE·1,12:INPUT·"Enter·the·height·-·",c
PANI 820·LOCATE·1,14:INPUT·"Enter·the·length·of·side·3·-·",d
CBBB 830·LOCATE·1,16:INPUT·"Enter·the·units·of·measurement·-·",b$
FAIA 840·e=a/2*c:f=a+c+d
LAEA 850·LOCATE·1,19:PRINT·"Perimeter·=·",f;b$
LAPI 860·LOCATE·1,21:PRINT·"Area······=·",e;b$;CHR$(252)
MAOG 870·LOCATE·24,25:PRINT·"Press·a·key·for·MENU"
HANG 880·IF·INKEY$=""·THEN·880·ELSE·10
BADK 890·CLS
CAAD 900·MODE·2
DAMP 910·ORIGIN·250,250
BBDB 920·PLOT·0,0:DRAW·200,0:DRAW·300,100:DRAW·100,100:DRAW·0,0:MOVE·50,10:FILL·1
JAEF 930·LOCATE·1,2:PRINT·"Equations·-"
NAKA 940·LOCATE·1,4:PRINT·"·Area·-·length·x·height"
NAGJ 950·LOCATE·1,6:PRINT·"·Perimeter·-·(2·x·length)·+"
KAKK 960·LOCATE·1,7:PRINT·"··············(2·x·height)"
MABI 970·LOCATE·1,12:INPUT·"Enter·the·length·-·",a
MADC 980·LOCATE·1,14:INPUT·"Enter·the·width·-·",b
CBJB 990·LOCATE·1,16:INPUT·"Enter·the·units·of·measurement·-·",c$
FADJ 1000·d=a*b:e=(2*a)+(2*b)
LAJC 1010·LOCATE·1,19:PRINT·"Perimeter·=·",e;c$
LAEL 1020·LOCATE·1,21:PRINT·"Area······=·",d;c$;CHR$(252)
MADJ 1030·LOCATE·24,25:PRINT·"Press·a·key·for·MENU"
HAHL 1040·IF·INKEY$=""·THEN·1040·ELSE·10
BAIM 1050·CLS
CAOF 1060·MODE·2
EAIC 1070·ORIGIN·250,230
MAIK 1080·PLOT·0,0:DRAW·100,0:DRAW·100,100:DRAW·0,100:DRAW·0,0
LALJ 1090·PLOT·100,100:DRAW·150,150:DRAW·150,50:DRAW·100,0
IANL 1100·PLOT·150,150:DRAW·50,150:DRAW·0,100
JALH 1110·LOCATE·1,2:PRINT·"Equations·-"
ABJA 1120·LOCATE·1,4:PRINT·"·Area·-·length·x·width·x·height"
NACF 1130·LOCATE·1,6:PRINT·"·Perimeter·-·12·x·length"
MAJK 1140·LOCATE·1,14:INPUT·"Enter·the·length·-·",a
CBND 1150·LOCATE·1,16:INPUT·"Enter·the·units·of·measurement·-·",b$
EAIM 1160·c=a*a*a:d=12*a
GALF 1170·SYMBOL·255,112,8,48,8,112
LAPC 1180·LOCATE·1,19:PRINT·"Perimeter·=·",d;b$
LANL 1190·LOCATE·1,21:PRINT·"Area······=·",c;b$;CHR$(255)
MACJ 1200·LOCATE·24,25:PRINT·"Press·a·key·for·MENU"
HAFL 1210·IF·INKEY$=""·THEN·1210·ELSE·10
BAHM 1220·CLS
CANF 1230·MODE·2
EAJC 1240·ORIGIN·250,250
MAPE 1250·PLOT·0,0:DRAW·100,0:DRAW·100,50:DRAW·0,50:DRAW·0,0
LAPG 1260·PLOT·100,50:DRAW·180,100:DRAW·180,50:DRAW·100,0
IAFJ 1270·PLOT·180,100:DRAW·80,100:DRAW·0,50
JADI 1280·LOCATE·1,2:PRINT·"Equations·-"
ABBB 1290·LOCATE·1,4:PRINT·"·Area·-·length·x·width·x·height"
NAOL 1300·LOCATE·1,6:PRINT·"·Perimeter·-·(4·x·length)·+"
NAKB 1310·LOCATE·1,7:PRINT·"·(4·x·width)·+·(4·x·height)"
MAFK 1320·LOCATE·1,10:INPUT·"Enter·the·length·-·",a
MAHE 1330·LOCATE·1,12:INPUT·"Enter·the·width·-·",b
MAEK 1340·LOCATE·1,14:INPUT·"Enter·the·height·-·",c
CBBE 1350·LOCATE·1,16:INPUT·"Enter·the·units·of·measurement·-·",d$
GAMF 1360·SYMBOL·255,112,8,48,8,112
HANG 1370·f=(4*a)+(4*b)+(4*c):e=a*b*c
LAFD 1380·LOCATE·1,19:PRINT·"Perimeter·=·",f;
```

```
     d$
LADM 1390·LOCATE·1,21:PRINT·"Area······=·",e;
     d$;CHR$(255)
MAEJ 1400·LOCATE·24,25:PRINT·"Press·a·key·for
     ·MENU"
HAJL 1410·IF·INKEY$=""·THEN·1410·ELSE·10
BAJM 1420·CLS
CAPF 1430·MODE·2
EALC 1440·ORIGIN·250,250
BAKL 1450·DEG
DADA 1460·MOVE·0,50
GAKB 1470·FOR·a=0·TO·360·STEP·10
GAIL 1480·DRAW·50*SIN(a),50*COS(a)
CANC 1490·NEXT
JAOH 1500·LOCATE·1,2:PRINT·"Equations·-"
MAHP 1510·LOCATE·1,4:PRINT·"·Area·-·4";CHR$(2
     54);"r";CHR$(255)
GAKI 1520·PRINT·#2,CHR$(22);CHR$(1)
NALP 1530·LOCATE·#2,1,4:PRINT·#2,"·Area·-·4";
     CHR$(254);"r";CHR$(255)
IAMP 1540·LOCATE·#2,1,4:PRINT·#2,"·······___
     _"
```

Line 1630

Here's another INKEY$ routine you might find useful. All this line is doing is looping on itself until a key is pressed, at which point it's simply jumping back to line 10.

```
HADL 1550·LOCATE·1,5:PRINT·······"··········3
     "
JAPC 1560·LOCATE·1,7:PRINT·"Take·Pi·as·:"
FAKN 1570·LOCATE·1,8:PRINT·PI
LAGF 1580·LOCATE·1,14:INPUT·"Enter·radius·-·"
     ,a
CBFE 1590·LOCATE·1,16:INPUT·"Enter·the·units·
     of·measurement·-·",b$
EABI 1600·c=4*PI*a*a*a/3
LABM 1610·LOCATE·1,19:PRINT·"Area······=·",c;
     b$;CHR$(255)
MAIJ 1620·LOCATE·24,25:PRINT·"Press·a·key·for
     ·MENU"
HABM 1630·IF·INKEY$=""·THEN·1630·ELSE·10
BANM 1640·CLS
CADG 1650·MODE·2
EAJC 1660·ORIGIN·300,230
BAOL 1670·DEG
DAHA 1680·MOVE·50,0
GAHF 1690·FOR·a=90·TO·270·STEP·10
GAPK 1700·DRAW·50*SIN(a),10*COS(a)
CAIC 1710·NEXT
FAGL 1720·PLOT·50,0:DRAW·50,120
GABB 1730·PLOT·-50,0:DRAW·-50,120
EALC 1740·ORIGIN·300,350
DABA 1750·MOVE·0,10
GAMB 1760·FOR·a=0·TO·360·STEP·10
GAGL 1770·DRAW·50*SIN(a),10*COS(a)
CAPC 1780·NEXT
JAJI 1790·LOCATE·1,2:PRINT·"Equations·-"
NAJK 1800·LOCATE·1,4:PRINT·"·Area·-·";CHR$(25
     4);"r";CHR$(252);"h"
JANC 1810·LOCATE·1,7:PRINT·"Take·Pi·as·:"
FAIN 1820·LOCATE·1,8:PRINT·PI
MADL 1830·LOCATE·1,12:INPUT·"Enter·the·radius
     ·-·",a
MAIK 1840·LOCATE·1,14:INPUT·"Enter·the·height
     ·-·",b
CBFE 1850·LOCATE·1,16:INPUT·"Enter·the·units·
     of·measurement·-·",c$
DALM 1860·d=PI*a*a*b
GACG 1870·SYMBOL·255,112,8,48,8,112
LAMM 1880·LOCATE·1,19:PRINT·"Area······=·",d;
     c$;CHR$(255)
MABK 1890·LOCATE·24,25:PRINT·"Press·a·key·for
     ·MENU"
HABM 1900·IF·INKEY$=""·THEN·1900·ELSE·10
BANM 1910·CLS
CADG 1920·MODE·2
GAPI 1930·PRINT·#2,CHR$(22);CHR$(1)
MAGO 1940·LOCATE·#2,24,3:PRINT·#2,"Conversion
     ·Table"
MAJK 1950·LOCATE·#2,24,3:PRINT·#2,"__________
     ______"
IAPD 1960·LOCATE·26,6:PRINT·"L·E·N·G·T·H·"
CBMJ 1970·LOCATE·18,10:PRINT·"10·millimetres·
     (mm)·=·1·centimetre·(cm)"
MAMP 1980·LOCATE·32,12:PRINT·"10·cm·=·1·decim
     etre·(dm)"
NAPF 1990·LOCATE·32,14:PRINT·"10·dm·=·1·metre
     ·(m)·=·1·000·mm"
MAHO 2000·LOCATE·33,16:PRINT·"10·m·=·1·decame
     tre·(dam)"
NAGN 2010·LOCATE·31,18:PRINT·"10·dam·=·1·hect
     ometre·(hm)"
OAOP 2020·LOCATE·32,20:PRINT·"10·hm·=·1·kilom
     etre·(km)·=·1·000·m"
LBIP 2030·LOCATE·5,23:PRINT·"The·decimetre,·d
     ecametre·and·hectometre·are·very·rarely·
     used"
OAMN 2040·LOCATE·24,25:PRINT·"Press·a·key·for
     ·next·page"
IACC 2050·IF·INKEY$=""·THEN·2050·ELSE·2060
BAKM 2060·CLS
CAAG 2070·MODE·2
GAMI 2080·PRINT·#2,CHR$(22);CHR$(1)
NAFJ 2090·LOCATE·#2,24,3:PRINT·#2,"Conversion
     ·Table·II"
NAKL 2100·LOCATE·#2,24,3:PRINT·#2,"__________
     __________"
HAMG 2110·LOCATE·28,6:PRINT·"·A·R·E·A·"
GAEC 2120·SYMBOL·252,24,36,8,16,60
CBBO 2130·LOCATE·22,10:PRINT·"100·sq·mm·(mm";
     CHR$(252);")·=·1·sq·cm·(cm";CHR$(252);")
     "
PAMK 2140·LOCATE·22,12:PRINT·"100·sq·cm······
     ·=·1·sq·dm·(dm";CHR$(252);")"
JADB 2150·LOCATE·32,14:PRINT·"and·so·on"
OAML 2160·LOCATE·26,16:PRINT·"1·sq·dam·(dam";
     CHR$(252);")·=·1·are"
CBMH 2170·LOCATE·20,18:PRINT·"100·ares·=·1·sq
     ·hm·(hm";CHR$(252);")·=·1·hectare"
OBKG 2180·LOCATE·3,21:PRINT·"The·hectare·is·t
     he·only·unit·which·the·prefix·hecto·is·i
     n·common·use"
OACO 2190·LOCATE·24,25:PRINT·"Press·a·key·for
     ·next·page"
IAJB 2200·IF·INKEY$=""·THEN·2200·ELSE·2210
BAHM 2210·CLS
CANF 2220·MODE·2
GAJI 2230·PRINT·#2,CHR$(22);CHR$(1)
NALN 2240·LOCATE·#2,24,3:PRINT·#2,"Conversion
     ·Table·III"
OAPB 2250·LOCATE·#2,24,3:PRINT·#2,"__________
     __________"
IAPG 2260·LOCATE·26,6:PRINT·"·V·O·L·U·M·E·"
GANF 2270·SYMBOL·255,112,8,48,8,112
DBDC 2280·LOCATE·20,10:PRINT·"1·000·cu·mm·(mm
     ";CHR$(255);")·=·1·cu·cm·(cm";CHR$(255);
     ")"
PALO 2290·LOCATE·20,12:PRINT·"1·000·cu·cm····
     ···=·1·cu·dm·(dm";CHR$(255);")"
JAAB 2300·LOCATE·32,14:PRINT·"and·so·on"
MAFJ 2310·LOCATE·24,25:PRINT·"Press·a·key·for
     ·MENU"
HALL 2320·IF·INKEY$=""·THEN·2320·ELSE·10
```

Line 1860

Following the theme this month of having no particular theme to speak of, you might like to think about the equation:

PI*a*a*b

You see, though this command is fully functional the way it is, it's always worth remembering that if there is more than two 'a's – say three – the following example would be a lot more efficient:

PI*b*a^3

Typing listings

If you've never typed in a listing from *AA* before, then reading this following blurb is a REALLY GOOD IDEA.

- Basically, all you need to do is type in exactly what we print EXCEPT the first four letters in each line.
- The first four letters are a code which work in conjunction with our unique and utterly excellent *TypeChecker* program below.
- Only press RETURN when you get to the end of a command line. If a command line goes on to two lines do not press RETURN at the break in the line. Your lines on screen should break in exactly the same place as they do in the mag.

TypeChecker

This is a program that enables you to check whether you have typed *AA* listings in correctly. Type it in, then SAVE it for future use. So, when you want to type in an *AA* listing, and you want to double check that you got it right:

- Load up *TypeChecker*.
- Type NEW.
- Type in the listing of your choice.
- When you've finished type LIST.
- At the end of every line a highlighted code will appear. It should correspond with the code printed in front of the same line in *AA*. If it doesn't you have typed in that line incorrectly.

```
PAML 10·'·TypeChecker·V1.0·-·By·Simon·Forrest
     er·-·Dec·1992
MAOJ 20·'·For·Amstrad·Action·-·Public·Domain
DANK 30·MEMORY·&9FFF
CAJK 40·csum=0
GAME 50·FOR·addr=&A000·TO·&A05B
DAKJ 60·READ·byte$
GAJB 70·byte=VAL("&"+byte$)
FACF 80·POKE·addr,byte
GAFB 90·csum=csum+byte
DALK 100·NEXT·addr
OACI 110·IF·csum<>&2ADD·THEN·PRINT·"Checksum·
     Error":END
LAHE 115·POKE·&A001,PEEK·(&BB5B):POKE·&A002,P
     EEK·(&BB5C)
KAHI 120·POKE·&BB5A,&C3:POKE·&BB5B,&3:POKE·&B
     B5C,&A0
MACN 130·PRINT·"TypeChecker·V1.0·Installed":E
     ND
MABC 140·DATA·CF,FE,93,FE,0A,CA,00,A0,F5,C5,D
     5,E5,FE,0D,CA,22
LACJ 150·DATA·A0,5F,16,00,2A,5A,A0,19,22,5A,A
     0,E1,D1,C1,F1,C3
LAFJ 160·DATA·00,A0,3E,20,CD,00,A0,3E,18,CD,0
     0,A0,2A,5A,A0,7C
LADI 170·DATA·CD,45,A0,7D,CD,45,A0,3E,18,CD,0
     0,A0,21,00,00,22
LACN 180·DATA·5A,A0,C3,1B,A0,F5,E6,0F,C6,41,C
     D,00,A0,F1,E6,F0
KAJC 190·DATA·1F,1F,1F,1F,C6,41,CD,00,A0,C9,0
     0,00,END
```

Turning *TypeChecker* off (it is automatically initialised when you RUN the program above) and back on again is quite simple:

POKE &BB5B,0 — To turn it off
POKE &BB5B,3 — To turn it back on again

TypeChecker was an *Amstrad Action* presentation brought to you in association with Hairy Happening Productions Ltd.

Access **(0257) 421915**

O.J. SOFTWARE

(0257) 421915 VISA

Fast Friendly Service

ARCADE

	CASS	DISK
Addams Family (128K)		£14.95
Back to the Future II		£6.99
Bonanza Bros		£4.99
Captain Blood		£6.95
Cisco Heat	£2.99	£6.99
Dizzy Crystal Kingdom	£8.50	
Double Dragon III + Rodland		£12.95
Edd the Duck	£3.75	£6.99
F16 Combat Pilot	£3.75	£7.95
Galactic Games		£6.99
Ghostbusters II		£6.99
G-Loc (128K)		£9.95
I. Jones Fate Atlantis		£13.95
Incredible Shrinking Sphere		£6.99
Lemmings	£12.95	£15.95
Light Corridor		£6.99
Mystical		£6.99
Myth	£3.75	£6.99
New York Warriors		£2.99
Nigel Mansell W Champ	£9.50	£12.95
Nightbreed + Midnight Resistance		£9.99
North & South		£13.95
Outrun Europa		£13.95
Paperboy II	£9.50	£12.95
Pop Up		£6.99
Prehistorik II	£9.50	£12.95
Rodland	£3.75	£12.95
Shadow of the Beast		£6.99
Shadow Dancer + Alien Storm		£12.95
Sim City		£14.95
Street Fighter II		Phone
Strider II + UN Squadron		£6.99
Super Cauldron	£9.50	£12.95
Titus the Fox		£12.95
Tetris		£6.99

SPECIAL OFFER ON DISK ONLY
Monty Python + Monopoly + Wild Streets + Off Shore Warrior + Joystick Splitter for £9.99
AVAILABLE WHILE STOCKS LAST

COMPILATIONS

	CASS	DISK
2 HOT 2 HANDLE: Golden Axe, Sup. Off Rd, Tot. Recall, Shad. Warriors	£12.95	£15.95
HOLLYWOOD COLLECTION: Robocop, Ghostbusters II, Batman Movie, I. Jones Last Cru		£15.95
LOOPZ COLLECTION: Loopz, Emlyn Hughes, Arcade Quiz, Helter Skelter		£9.99
DREAM TEAM: Terminator II, Simpsons, WWF Wrestlemania		£15.95
MEGA SPORTS: 30+ Sporting Events		£15.95
MINDSTRETCHERS: Monopoly, Scrabble, Cluedo		£12.95
SUPERFIGHTER: Final Fight, WWF Wrestlemania., Pit-Fighter		£15.95
SOCCER MANIA: F'ball Mgr II, F'ball Mgr World Cup, Gazza Sup Socc, M'prose Socc		£15.95

STRATEGY/SIMULATION

	CASS	DISK
Cluedo		£6.99
Colossus 4.0 Bridge	£3.75	£7.95
Colossus 4.0 Chess		£7.95
Football Manager II		£6.99
Football Manager II + Exp Kit		£9.99
Football Manager World Cup		£11.95
Football Manager III		£12.95
Monopoly	£2.99	£2.99
Nigel Mansell W. Champ	£9.50	£12.95
Sporting Triangles		£6.99
World Class Rugby		£12.95
F16 Combat Pilot	£3.75	£7.95

BUSINESS/UTILITIES

	CASS	DISK
Advanced Art Studio 6128		£19.95
Adv Art + AMX Mouse + M Mat		£54.95
Colour Dump 3 (Col Scr Dump)		£15.95
Crash Course Typing Tut 6128		£20.95
Discology (Disk Utility)		£12.95
Mastercalc 128 (128k)		£27.95
Masterfile III (128k)		£29.95
Microdesign + DTP for 6128/6128+		£29.99
Microdesign + with AMX Mouse +MM		£59.99
Mini Office II	£12.95	£16.95
Money Manager (+PCW)		£24.95
Proprint (Print Enhancer)		£15.99
Prospell		£20.95
Protext	£16.95	£21.95
Protype (Print Enhancer)		£23.95
Tasword 6128		£24.95
Tas-Spell (For Tasword)		£20.95

ACCESSORIES

AMX Mouse & Interface	£34.95
AMX Mouse + Adv Art + Mouse Mat	£54.95
Amstrad FD1 2nd Disk Drive	£59.95
Cassette Alignment Kit (inc. Game)	£7.95
Cassette Lead (with REM Conn)	£3.95
Cover Set (2 piece, state mach & mon)	£8.95
Copy Holder	£8.95
Disk Drive Cleaner 3"	£5.95
Disks 3" Maxell 1: £2.65 5: £12.50 10:	£23.95
Disks 3" Ex Games Good Qual 10:	£12.99
Joystick Splitter	£2.99
Kboard Ext Leads 464 £8.95, 6128	£9.95
Kboard Ext Leads 464+/6128+	£9.95
Memory Expansion 64K for 464	£44.95
Printer Cable 1 Mtr £8.95, 2 Mtr	£10.95
Printer Cable 464+/6128+ 2Mtr	£7.95
Screen Filter Antistatic Mono/Col	£14.95

JOYSTICKS

COMPETITION PRO Mini	£14.95
CHEETAH Bug	£13.95
CHEETAH Mach 1	£11.95
KONIX Speedking	£11.95
KONIX Navigator	£13.95
POWERPLAY Terminator	£14.95
QUICKSHOT Python 1	£10.95
QUICKSHOT Python 1 Microswitch	£11.95
ZIPSTICK Super Pro	£14.95
464+/6128+/GX4000 Games Paddle	£8.95

EDUCATION

	CASS	DISK
Fun School I Under 5		£8.95
Fun School I 5-8		£8.95
Fun School I 8-12		£8.95
Fun School III or IV 5-	£10.95	£13.95
Fun School III or IV 5-7	£10.95	£13.95
Fun School III or IV 7-11	£10.95	£13.95
Playdays 3-8	£10.95	
Lets Play with Words 4-8	£12.95	£12.95
Fun with Words 7-	£8.50	£11.95
Read Right Away 1 5-8	£9.95	£12.95
Read Right Away 2 6-9	£9.95	£12.95
Read Right Away 3 7+	£9.95	£12.95
Better Spelling 9+	£8.95	£12.95
Lets Play Numbers 4-8	£12.95	£12.95
Lets Play Money 4-8	£12.95	£12.95
Primary Maths 3-12	£24.95	£24.95
Fun with Numbers 7-	£8.50	£11.95
Target Maths 6-13		£12.95
Micro Maths 11+	£24.95	£24.95
Better Maths 12-16	£8.95	£12.95
Mega Maths 15+	£24.95	£24.95
French Mistress 11+		£15.95
German Master 11+		£15.95
Spanish Tutor 11+		£15.95
Micro English 8-Ad	£24.95	£24.95
The Three Bears 5+ (6128)		£12.95
Five on Treasure Island	£9.50	£11.95
Granny's Garden 6-10 (6128)		£16.95
Dragon World 6-10 (6128)		£20.95
Giant Killer Maths Adv 9-14		£15.95
Answer Back Jnr Quiz 6-11		£11.95

FACTFILE SERIES FOR ANSWER BACK JNR QUIZ

Arithmetic 6-11	£7.95
Spelling 6-11	£7.95
World Geography 11+	£7.95
Natural History 10+	£7.95

PRINTERS

All printers listed below are suitable for use with AMSTRAD CPC, ATARI ST, COMMODORE AMIGA, IBM PC & COMPATIBLES

When ordering please state computer

CITIZEN 120D + 9 Pin Mono	£139.95
STAR LC20 9 Pin Mono	£149.95
STAR LC100 9 Pin Mono/Col	£189.95
STAR LC24-20 24 Pin Mono	£209.95
STAR LC24-100 24 Pin Mono	£219.95
STAR LC24-200 24 Pin Mono	£259.95
STAR LC24-200 24 Pin Mon/Col	£289.95

All prices include cable & delivery

PRINTER RIBBONS

Quantity:	1	2	5
DMP 2000/3000	£3.75	£7.00	£16.25
CITIZEN 120D	£3.75	£7.00	£16.25
PANASONIC KXP10/1180	£3.75	£7.00	£16.25
STAR LC10/20/100	£3.75	£7.00	£16.25
STAR LC24-10/20/200	£3.95	£7.50	£17.50
PANASONIC KXP1124	£3.75	£7.00	£16.25
STAR LC200 Mono	£4.95	£9.50	
STAR LC200 Colour	£11.95	£22.95	

Other printer ribbons please phone

RIBBON RE-INK £12.95

BUDGET CASSETTES £3.75 EACH

Adv Pinball	Pro Boxing
Continental Circus	Dizzy Yolk Folk
Double Dragon II	Dragons of Flame
Emlyn Hughes Soccer	F15 Strike Eagle
F16 Combat Pilot	Flimbo's Quest
Golden Axe	Gunship
Hudson Hawk	Lotus Turbo
Pitfighter	Rick Dangerous II
Rodland	Silent Service
Streetfighter	Terminator II
Trivial Pursuits	Turbo Tortoise
Turrican II	WWF Wrestlemania

MANY MORE GAMES STOCKED. PLEASE WRITE OR TELEPHONE FOR LATEST PRICE LIST. PRICES INCLUDE POSTAGE & PACKING IN U.K. PLEASE MAKE CHEQUES & POSTAL ORDERS PAYABLE TO: O.J. SOFTWARE AND SEND TO: O.J. SOFTWARE, 273 MOSSY LEA ROAD, WRIGHTINGTON, NR. WIGAN, LANCS WN6 9RN (MOST ORDERS DESPATCHED BY RETURN). ACCESS & VISA ORDERS TEL/FAX ON 0257 421915
MON-FRI 9.00 - 17.30, SAT 9.00-12.30 (ANSWERPHONE/FAX OUTSIDE HOURS). OVERSEAS ORDERS WELCOME (SOFTWARE ADD £1 PER ITEM POSTAGE; PAYMENT BY CREDIT CARD, EUROCHEQUE OR BANK DRAFT)

3.5" Supa-Drive £69.95

- ★ 800K per Disc
- ★ Multi Compatible
- ★ Compact Size
- ★ TEAC 1.44Mb Mech
- ★ Side Switch
- ★ Dual Mode
- ★ External PSU reqd
- ★ Free Delivery

★★ Including FREE MS800 FREE File Transfer Disc ★★

ABBA Upgrade for CPC6126 Plus £25.00
Please phone for details

64K DKtronics £39.95 RAM Pack

OTHER PRODUCTS
User Manuals
System Discs
Drive Mechanisms
Head Cleaners
Service Manuals
Printer Cables
Widgets
Utilities

Write or Phone for our *FREE* Catalogue

Power Supplies
£9.95 Unregulated
£14.95 Regulated

Bonzo Super Medler	£13.95
Bonzo Blitz	£13.95
Bonzo Big Batch	£9.95
Bonzo Flash Pack	£9.95
Maxidos	£13.95
MS800	£9.95
ABBA Switch 6128	£12.95
3rd Drive Switch	£12.95

3.5" Discs (10)	£7.95
3" Discs (Amsoft)(10)	£19.95
Disc Box (Holds 40)	£7.95
Head Cleaner (3" or 3.5")	£4.95

Access VISA

6128 ROM £24.95
Includes Full Fitting Instructions

DDI-1 Disc Drive & Interface £149.95
(3" or 3.5" Drive)

FD1 Disc Drive £79.95

Microform — *191 Watling Street Road, Fulwood, Preston PR2 4AE*

Phone: 0772 701248 Fax: 0772 703131

CPC NOW!: 0353 663030

HARDWARE

464 Keyboard	£39.95
464 Plus Keyboard	£58.95
6128 Keyboard	£69.95
6128 Plus Keyboard	£call
GX 4000	£23.95
464 with colour Monitor	£105.00
6128 with colour Monitor	£129.95
CPC/PLUS Monitor	£85.95

ACCESSORIES

MP1 modulator	£24.95
MP2	£29.95
DD1 3" Disc drive	£69.95
2nd 3" Disc drive	£44.95
Modem	£25.95
10 Maxell 3" discs	£15.95
10 Ex software house discs	£8.95
3" Disc cleaner	£4.95
10 Sony 3.5" discs	£6.95

Many more accessories available

CPC NOW!
The magazine for all CPC owners, one of the largest CPC magazines and only £1.20 per issue.

CARTRIDGES

Klax	£13.95
Pro Tennis Tour	£14.95
World of Sports	£14.95

Many more available

THIS AND THAT
Ginormous collection pack with twenty great games *Only* £4.95
Art Package, SMart+ disc/tape £12.95
Hundreds of copies of Amstrad Action and other magazines, from only £0.65-£1.75. Ring for complete list.

Joysticks - large range, ring for list.

All prices include postage and packaging. Cheques payable to:
CPC NOW!, 3 Saint Ethelwolds Close, Ely, Cambridgeshire CB6 3AX
CPC NOW! (0353) 663030

VERYSOFT

Committed to the future of AMSTRAD computing

GRIPPER (128k + disk only)
The ultimate program editor.
Create your own personalised programs.

Features include:
Built in sprite editor.
Full search facilities incl. "Wildbyte".
Multiview utility: up to 4 disassembler listings on screen at once.
Full screen memory editor.
Full screen memory editor.
Load/save files including Multiface.
Fully menu driven.

[£14.50 + 75p p+p]

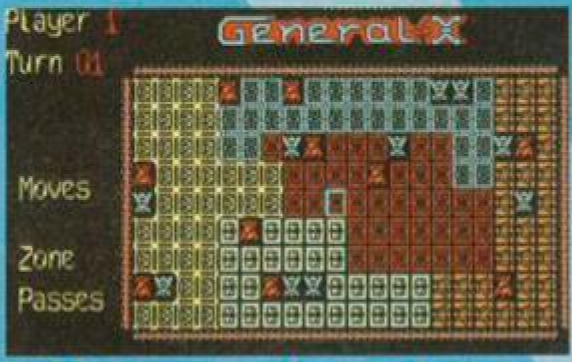
COMPARATOR (128k + DISK ONLY)
Automatic poke finder for use with a Multiface. Includes full memory editors + disassembler.
[£14.50 + 75p p+p]

PROGRAMMERS
If you have written any software that you believe is of commercial quality, be it a game or a serious progam, then please send a copy to VERYSOFT at the address below. If we think it is of good enough quality, we can handle the marketing for you.
We pay 55% of total profits!

Make cheques/P.O.s payable to W.Davis
Send to: VERYSOFT, 450 Roughwood Road, Wingfield Estate
ROTHERHAM, South Yorkshire S61 4LA

True Brew

It isn't only the music biz that has an indie scene. The CPC has a thriving cottage industry producing what's known as Homebrew software. In the first of a new series Simon samples the wares of one particular homebrewer, Angela Swinbourne.



My family name came from woodcutters. What the hell did the 'X' family do, then?

Defining homebrew software as existing somewhere between PD and commercial software is a rather catchy, nicely-processed, easy-to-swallow in a TV advert-sort-of-way description. Broadly speaking it's correct, but it's far too trite to do homebrew the justice it deserves. Homebrew software might not have the professional polish of the stuff that the major software houses have produced, but in many ways, it's just as good if not better. And, most important of all, it's a growing industry.

Brew up

Homebrew software is exactly that – software that's been written by amateur programmers at home. This is software that's been written by a CPC nut with other CPC nuts in mind.

The underlying attitude of homebrew software is fairly friendly as well – the point isn't to create the biggest game since *Elite*, but to create a few really fun games that cost just a few quid. There're no flashy graphical effects, no trade marks, just games based on concepts rather than gimmicks.

Anyway, in order to alert you as to what's hovering about out there on the homebrew scene, each month I hope to be taking a look at different selections , to see just what's on offer from the homes of CPC addicts.



This month's brewer's choice:

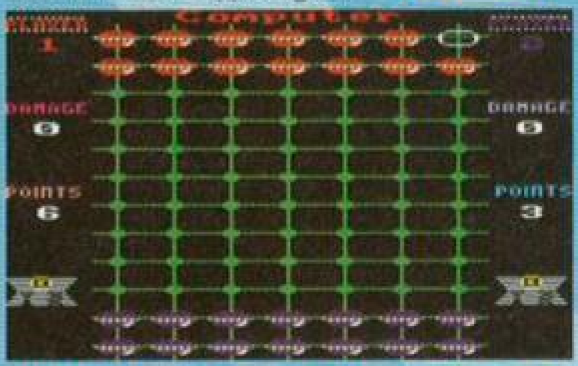
Crystal X Software

If you take a look at page 56, you'll find a storming review of the excellent *Stellar Outpost*, a game from Angela Swinbourne of Crystal X Software. This is a home brewery that, for the year or so that it's been around, has specialised in strategy games. Anyway, we thought we'd have a flick through Crystal X's catalogue.

Cloaker (£2)

This one is definitely what homebrew software is all about – strategy games. It's a bit more chess-like than most, though, involving the movement of a fleet of ships, and the destruction of an opposing set





It's like a cosmic game of chess – how like life, as pretentious film characters say.

of ships, presumably because they pronounced the word 'scone' differently, or something.

As well as being an excellent game to sit and relax with, it's a perfect example of the kind of title that homes will undoubtedly brew (well, I assume that's where the name came from). It requires brainpower, patience, and, above all, a little bit of foresight (concepts which major software houses always seem to shun).

Rating ★★★

General X (£2)

This one's a slightly strange (or should that be unusual?) concept for a strategy game. The plot is simple – you have to promote all 10 of your units from the rank of Private to the rank of General. But the gameplay is far from straightforward. Here's a brief clip from the instructions:

"The board is divided into five zones. A unit can only move freely through a zone if it has the appropriate clearance pass for it. If the unit enters a zone which it doesn't have clearance for then that unit cannot move for two turns, after which it has earned the pass for that zone."

Have you figured it out yet? Well, it's basically like a board game, and within those parameters, it works very well. The gameplay goes on to cover stealing passes from enemies, sending troops into limbo, rendering squares un-usable, and all the other stuff that goes with a game based on sneaky tactics.

As one of the two-player games in the collection (though you can play against the computer if you wish), this is definitely one you should investigate, as it's darned good.

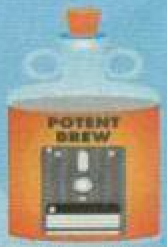
Rating ★★★★

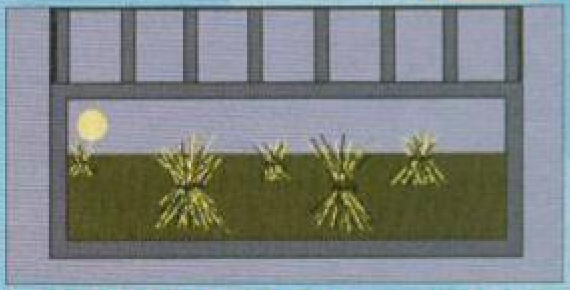
Justice (£3)

You have been convicted for a murder you didn't commit, and have escaped (*erm – Dave*) to find the real killer (*hold on a mo' – Dave*), in order to shop him to the rozzers (*where's the one-armed man, then? – Dave*).

Okay, it might sound like *The Fugitive*, but the similarities this text adventure has with the Harrison Ford film are only on the surface. There's a wide range of different disguises to find and wear, each of which must be suitable for your surroundings if you don't want to get caught. The range of locations is pretty huge including fields, barns, towns, houses and a police station (not the best place to be if you're an escaped convict).

The adventure was created using *GAC*, which is quite a good package as far as parsers are concerned, so the game is fairly easy to play. If you're into text adventures, this is one you really ought to check out, because it's not only a good example of *GAC*'s capabilities,





It's 'Attack Of The Killer Haystacks'. Watch out for that one on the right, he's got a gun!

But is homebrew anything more than just expensive PD?

Most definitely. You see, there are two fundamental differences between PD and homebrew software:

- **You pay a little more for homebrew stuff.**
- **It's copyrighted.**

Both these points might sound like reasons for sticking with PD, but homebrew games are generally more original and complex than PD stuff – no-one's going to pay money for yet another version of *Tetris* and the homebrewers know that. And while the games are generally not up to commercial standards in terms of presentation and packaging, the gameplay is often on a par with, if not much better than, the majority of stuff churned out by the major software houses in the last few years.

Homebrew software is slowly taking over the commercial CPC scene and keeping it alive. Quantum, STS and Sentinel are all homebrew companies; they just deal with the serious side of things instead of games (except Sentinel...) (...oh, and Quantum, come to think of it).

but a really good example of what can be done when someone with real imagination sits down to write an adventure.

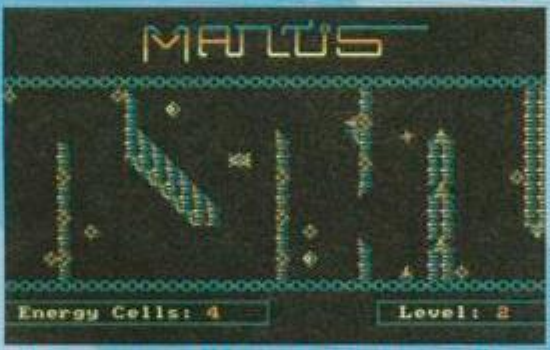
Rating ★★★★

Mantis (£2)

Crystal X Software's one foray into the action game genre frankly isn't very successful. Don't get me wrong, I've got nothing against action games, it's just that the rest of this collection shows a huge swing towards intelligent strategy titles, and the inclusion of a pretty bog-standard action game sticks out like a purple aardvark at an ant convention.

To be honest, it doesn't really compare well to a lot of action titles you'll find in the PD scene (the PD scene is very good at repetitively churning out little space ship games). You just pilot your ship around a maze-like screen, avoiding getting blasted and that's about it. Vaguely enjoyable.

Rating ★★



The praying mantis eats it's partner after mating, with baked beans and a nice coke.

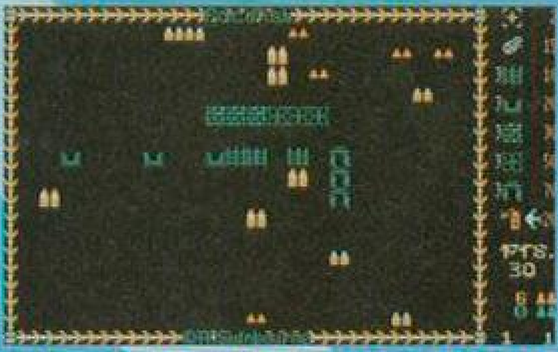
Pacifist (£1.50)

Here's another moderately groovy strategy title involving three different types of armies, "hell-bent on the destruction of their own kind". Your task is to turn the whole lot of 'em into pacifists. There are two ways to go about this:

1 You can march along in front of them wearing a paisley shirt, purple corduroys, and a daisy in your hair, singing *Give Peace A Chance*.

2 You can place obstacles in their paths, and attempt to stop them from warring by keeping them apart completely until you can turn them into good guys.

AA recommends the latter course of action. What this involves, besides placing obstacles, is luring the armies into a 'pacifist chamber', turning them into hippies and placing them at a random positions back on the map.



Personally, I found the easiest way to pacify a rampaging hell-bent psycho nutter army was to brew up huge pots of herbal tea...

As for a verdict, well, this is definitely one of the tougher games in the collection, but once you get the hang of it and accept that this isn't a game you can idly blast your way through, you should have quite a bit of fun.

Rating ★★★

PZP (£1.50)

Intergalactic tug-of-war, anyone? This is a great game in which the screen is split into two halves. You sit in a ship at the bottom of your half of the screen, while your opponent (human, computer, dog, Martian, Malaysian Spider Plant or anyone else you can convince) sits at the bottom of their half. Running along the top of the entire screen is a bar which stretches across both halves. On it there is a banner, which at the start of each game is precisely in the middle of the bar.

When the whistle blows both players start shooting at multicoloured targets at the top of their screens. Every time you hit the bar, you pull the banner further over to your side; the aim is to pull the banner right the way to your end of the bar.

There is a catch; every time a bullet hits one of the multicoloured targets, this causes an alien space craft to appear in the opposite half of the screen. Not only do these guys get in the way, preventing you from getting a clear shot at the targets, but they also drop bombs which freeze you for 10 seconds if one of them explodes on you head.



So wait a minute – you're telling me that I got all the aliens and the computer doesn't?


Aarghh! It's a, erm, what is this one, exactly, Andy?

So, you have to decide; do you waste bullets blasting the aliens or try to fire between them and hit the targets? Ah, decision, decisions...

Rating ★★★★

Sector 5 (£2)

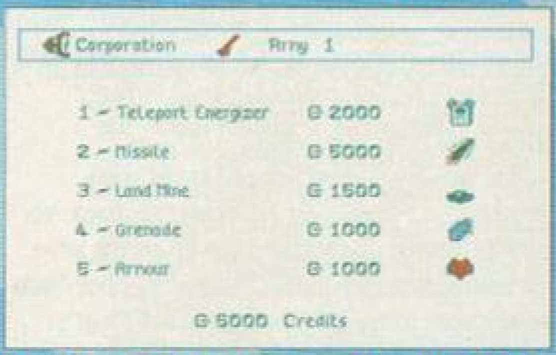
Could it be yet another two-player wargame? Sure is, and again it involves the domination of an alien planet. But this time you're not trying to prevent it, you're trying to achieve it.

The game is all about conquering sectors of the planet (you need five) by occupying the target square with your forces. I could spend ages going into strategies, tactics, and the like, but it won't really do you much good. In fact, I'm quite sure it'd be a lot easier to summarise by saying:

- It's a board game-type thing.
- It involves things like missiles, mines and teleports.
- It's good.

Thank you, and good night.

Rating ★★★



Oooh, if I get a teleport energiser, I might not have enough change for a land mine...

And finally...

We think it would be pretty fair to say that Angela Swinbourne has got quite a decent little collection of goodies on offer. Granted, the games won't be fast-running, demo-like or to everyone's tastes, but if you want to do a bit of thinking with some classically-designed and fun puzzles, concepts and environments, there's enough here to satisfy your tastes.

And I guess I'll be seeing you next month for the big one oh oh, and hopefully another collection to take a look at.

'Til then, have fun.

Crystal X details

To get your hands on any of the software you've seen today, send your cheque or postal order along with a tape or disk and a stamped addressed envelope to: Angela Swinbourne, 11 Vicarage View, Redditch, Worcestershire B97 4RF.

Venture Forth

Because you demanded it! Yes, it's the fully working, skeleton version of Laundry Blues, the text adventure that Simon Forrester has been showing you how to write over the last few months. Type it in and play it as it is, or make your own modifications – the choice is yours.

Finally we give in to the pressure. Here's the program as it's developed so far, that's with the object manipulation routines added. In fact the only bits that aren't here are a large proportion of the use routines (it's all explained later), and the character interaction stuff (we haven't finished planning all that stuff out yet). But you lot were getting so impatient, we had no choice but to reveal at least a workable form of the adventure.

Did-U-DIY?

If you've been taking my advice, and have been attempting to the write the thing yourself as I've been explaining the routines over the last few months, award yourself a Scouts' badge for computer programming and consider yourself well-respected by the *AA* crew. Now you can check out how I've written the program, and do a spot of comparing and contrasting in true GCSE English fashion.

You may have already typed in the semi-completed program from a few months back, so you'll be able to use that and just insert the bits you want with some crafty renumbering, but if you haven't been following the mag for that long, or you can't dig out the original, just type this one in:

```
CAPI 10·BORDER·0
CAAB 20·INK·0,0
CAKE 30·INK·1,26
BAKP 40·MODE·1
AFLP 50·PRINT·"···You·wake·with·a·start.·Ther
     e's·a·····bright·light·shining·in·your·e
     yes.·It···feels·like·the·sun.·Oh·no,·it·
     IS·the····sun.·It's·already·late·in·the·
     morning···and·you've·got·to·get·all·the·
     laundry···done·and·get·round·to·your·fri
     end's"
FBJN 60·PRINT·"house·for·lunch.·You'd·better·
     get·······cracking,·really..."
CCAB 70·PRINT·"···You·get·dressed·quickly·and
     ·wonder·what·to·do·in·that·hapless·kind·
     of·manner·you·have."
CAAM 80·GOSUB·350
DANB 90·'Parser
CAKO 100·GOSUB·810
CAPD 110·PRINT
DAAG 120·INPUT·"",i$
CABE 130·PRINT
EANA 140·i$=UPPER$(i$)
CABO 150·ERASE·w$
BAMJ 160·w=1
DAOB 170·l=LEN(i$)
DAON 180·FOR·a=1·TO·l
EAEE 190·c$=MID$(i$,a,1)
HAGI 200·IF·c$="·"THEN·w=w+1:GOTO·220
EAIG 210·w$(w)=w$(w)+c$
CAEH 220·NEXT·a
NAAB 230·IF·w$(1)="NORTH"OR·w$(1)="N"THEN·GOS
     UB·1100:GOTO·110
```

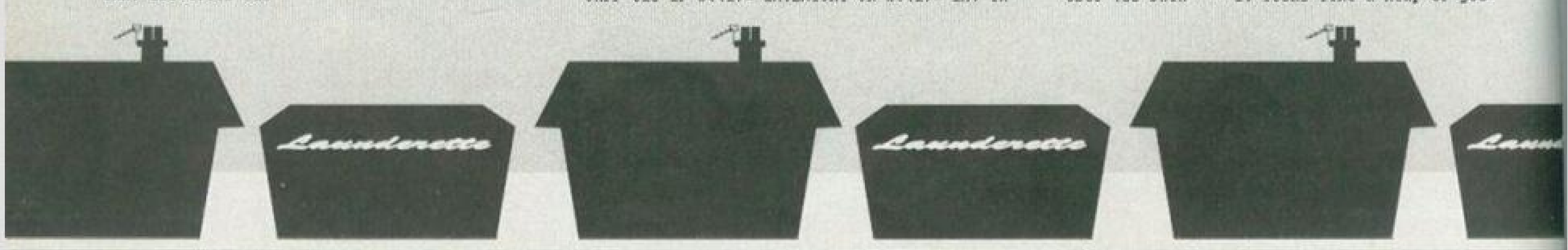
Lines 280-320

Yes! The Workshop boxes in Type-Ins have been such a success we've imported them over to Venture Forth – for ONE MONTH ONLY! These lines are the patches into the parser that we need to insert if we want to add new commands. As you can see, five new commands have been added:

1. Take or Get
2. Drop
3. Examine or X
4. Inventory or Inv
5. Use

Each of these lines, when activated by the appropriate command, will execute a subroutine, then return to the normal parser bit at line 110.

```
NADC 240·IF·w$(1)="SOUTH"OR·w$(1)="S"THEN·GOS
     UB·1150:GOTO·110
MAMK 250·IF·w$(1)="EAST"OR·w$(1)="E"THEN·GOSU
     B·1200:GOTO·110
MAKN 260·IF·w$(1)="WEST"OR·w$(1)="W"THEN·GOSU
     B·1250:GOTO·110
KAPB 270·IF·w$(1)="LOOK"OR·w$(1)="L"THEN·GOTO
     ·100
NADE 280·IF·w$(1)="TAKE"OR·w$(1)="GET"THEN·GO
     SUB·1300:GOTO·110
KAMB 290·IF·w$(1)="DROP"THEN·GOSUB·1460:GOTO·
     110
NAMB 300·IF·w$(1)="EXAMINE"OR·w$="X"THEN·GOSU
     B·1560:GOTO·110
OAPP 310·IF·w$(1)="INVENTORY"OR·w$(1)="INV"TH
     EN·GOSUB·1690:GOTO·110
JABN 320·IF·w$(1)="USE"THEN·GOSUB·1760:GOTO·1
     10
GAKO 330·PRINT·"···Come·again?"
CACK 340·GOTO·110
HAJA 350·'·Set·up·variables
DADA 360·DIM·w$(40)
CAMJ 370·loc=16
DAEP 380·DIM·acc(16,4)
DAMN 390·FOR·a=1·TO·16
CAFH 400·READ·a$
FAHH 410·a$=BIN$(VAL("&"+a$),8)
FAFF 420·FOR·b=1·TO·7·STEP·2
JALL 430·acc(a,((b+1)/2))=VAL("&x"+MID$(a$,b,
     2))
CAJH 440·NEXT·b
CAJH 450·NEXT·a
EAMC 460·DIM·obj$(16,5)
DAGO 470·FOR·o=1·TO·13
DAML 480·FOR·s=1·TO·5
EAHL 490·READ·obj$(o,s)
CAHI 500·NEXT·s
CAEI 510·NEXT·o
CAHJ 520·RETURN
GAFI 530·DATA·28,22,22,02,a8,02,08,08
HABE 540·DATA·a8,12,aa,8a,a0,02,80,80
MAFB 550·DATA·a·washing·machine,machine,1,0
KDHL 560·DATA·"···It·looks·like·a·rather·ordi
     nary······washing·machine.·I·bet·you·cou
     ld·put····some·washing·in·there.·It·also
     ·has·a····slot·for·coins·and·a·drawer·fo
     r·washing·powder."
HAKG 570·DATA·a·chair,chair,1,0
LBCH 580·DATA·"···It's·a·dodgy·looking·plasti
     c·chair,··but·you·could·probably·sit·on·
     it."
CBMM 590·DATA·a·very·nice·packet·of·washing·p
     owder,powder,6,4
LBHG 600·DATA·"···It·just·looks·like·the·sort
     ·of·thing·you·need·to·do·the·washing·wit
     h."
GAPL 610·DATA·a·hook,hook,7,0
ABME 620·DATA·"···It's·a·small·hook·with·some
     ·keys·on··it."
IALC 630·DATA·some·keys,keys,7,1
MAHJ 640·DATA·"···They're·door·keys.·Probably
     ."
MADH 650·DATA·some·coins·on·the·table,coins,7
     ,1
GBML 660·DATA·"···My·my,·some·money.·It's·in·
     your·houseso·it·must·be·yours."
GAAN 670·DATA·a·note,note,7,1
LBBL 680·DATA·"···It's·in·your·handwriting.·I
     t·says····`Don't·forget·to·buy·a·laundry
     ·bag.`"
ABKO 690·DATA·another·pile·of·dirty·clothes,c
     lothes,8,5
CBCJ 700·DATA·"···It·looks·like·a·heap·of·you
```



What – every single one?

Another really important thing to remember is that in order to make the game flow smoothly, and not point out to the player exactly what objects are directly relevant to completing the game, every object should have a use.

There are always going to be a few objects that you can't pick up, but add any objects like this to the 'use' branching bit of the program, along with a little comment like:

"What the hell are you going to use a chocolate teapot for, anyway?"

As the use branch bit operates at the moment, it will cope with unusable objects (or even just objects you couldn't be bothered to program) by, if no use routine was executed, defaulting to a sarcastic comment like:

"Well, that really helped didn't it?"

A parser with an attitude problem, or what?

```
     r·filthy··clothes."
LAKM 710·DATA·a·skateboard,skateboard,12,0
CBGK 720·DATA·"···It's·a·board·with·skates·on
     .·It's·no·use·at·all."
JADA 730·DATA·a·laundry·bag,bag,14,2
PBGE 740·DATA·"···It's·a·bag·for·putting·laun
     dry·in.···It·looks·like·it·might·be·just
     ·the·rightsize."
JAFD 750·DATA·some·money,money,15,1
JADJ 760·DATA·"···Hurrah,·you're·rich!"
OACK 770·DATA·a·pile·of·dirty·laundry,laundry
     ,16,5
ADCB 780·DATA·"···It's·a·ragged·heap·of·dirty
     ·clothes.·They·all·look·like·they·could·
     do·with·a·jolly·good·wash.·Maybe·you·sho
     uld·think·about·that."
IANP 790·DATA·a·motorbike,bike,16,0
KCHG 800·DATA·"···There·are·bits·of·motorbike
     ·all·over·the·floor.·It·looks·like·it·mi
     ght·be····Japanese.·You·ought·to·tidy·up
     ·later."
XAHH 810·'·Display·room·description
DALJ 820·RESTORE·940
EACL 830·FOR·a=1·TO·loc
CAAI 840·READ·d$
CANH 850·NEXT·a
CADP 860·PRINT·d$
IAHN 870·flg=0:PRINT·"You·can·see·";
DAOO 880·FOR·o=1·TO·16
PAMB 890·IF·VAL(obj$(o,3))=loc·THEN·PRINT·obj
     $(o,1);",·";:flg=1
CAHI 900·NEXT·o
ABGE 910·IF·flg=0·THEN·PRINT·"nothing·of·inte
     rest.":GOTO·930
JAMC 920·PRINT·"but·not·much·else."
CAMJ 930·RETURN
PEHJ 940·DATA·"You·are·in·the·launderette.·Yo
     u·are·····surrounded·by·split·plastic·se
     ats·and···unhappy·people.·The·room·smell
     s·of······washing·powder·and·boredom.·Th
     ere·are···washing·machines·by·the·wall·a
     nd·doors··to·the·south·and·east."
GEGK 950·DATA·"You·are·in·the·street.·Litter·
     blows·····along·the·road.·There·is·a·bus
     ·stop.·Theshelter·looks·a·bit·on·the·dod
     gy·side···but·it·looks·like·it·might·rai
     n.·The····door·to·the·launderette·is·to·
     the·west."
NEAH 960·DATA·"You·are·on·the·bus.·I·hate·bus
     es.·How·dothey·make·them·smell·so·disgus
     ting?·At··least·you·can·look·out·of·the·
     window.·Oryou·could·if·it·wasn't·steamed
     ·up.·I····hate·buses.·Mercifully,·the·jo
     urney·····doesn't·last·long."
JCLO 970·DATA·"You·are·in·the·street·outside·
     your······friend's·house.·There's·a·blue
     ·door·to··the·east·and·a·bus·stop·to·the
     ·west."
JCFK 980·DATA·"You·are·in·another·bit·of·grot
     ty········suburban·street.·You·can·go·ea
     st·into·a·shop,·or·north·into·a·laundere
     tte."
OELK 990·DATA·"···It's·a·washing·powder·shop.
     ·Despite··there·being·over·250·different
     ·brands,··they're·all·made·by·one·of·onl
     y·two·····manufacturers.·How·bizarre.·Th
     ere's·a···nice·looking·person·behind·the
     ·counter.·The·only·exit·is·west."
BDBO 1000·DATA·"You're·in·your·kitchen.·Don't
     ·you·ever··do·any·washing·up?·This·place
     ·is·a······disgrace.·There's·a·hook·by·t
     he·door····which·is·to·the·south."
AEJM 1010·DATA·"You·are·in·your·bathroom.·I·h
     ope·your···vaccinations·are·up·to·date.·
     Domestos·isNOT·a·Greek·island·and·splash
     ing·it·····about·a·bit·could·save·your·l
     ife.·The···door·is·to·the·south."
KDMB 1020·DATA·"More·grotty·old·street.·The·s
     ooner·this·whole·place·gets·demolished,·
     the·better.You·can·go·north,·south,·or·e
     ast·and·youshould·do·one·of·them·really·
     soon."
HDLD 1030·DATA·"Out·in·the·street.·You·close·
     your·front·door·behind·you.·Smell·that·s
     uburban····air.·Foul,·isn't·it?·Anyway,·
     you·can·go·west·or·east·(back·to·the·hou
     se)."
CDFM 1040·DATA·"Your·front·hall·looks·a·bit·t
     idier·than·the·rest·of·the·house.·You·ca
     n·go·······upstairs·(east),·north,·south
     ,·or·west.·Blimey,·what·a·choice."
LDKA 1050·DATA·"The·landing·is·a·bit·of·a·sta
     te,·too.···That·skateboard·looks·a·bit·d
     angerous···there·at·the·top·of·the·stair
     s.·You·can·go·north,·south,·or·down·the·
     stairs·····(west)."
MCFI 1060·DATA·"Lawks·a·lordy,·it's·some·more
     ·street.···But·wait.·What's·this?·There'
     s·a·shop·tothe·east.·Or·you·can·go·north
     ·if·you···want."
CFMN 1070·DATA·"Well·I'll·be·horn·swoggled!·I
     t's·a······laundry·bag·shop,·dedicated·t
     o·the·sale·of·jolly·helpful·laundry·bags
     .·What·a···good·thing·you·stumbled·upon·
     it.·There'sa·nice·looking·woman·behind·t
     he·counter.Or·you·can·leave·by·going·wes
     t."
KDNN 1080·DATA·"Living·rooms·are·funny·old·th
     ings,······aren't·they?·This·is·yours·an
     d,·like·therest·of·your·house,·it·could·
     do·with····some·tidying·up.·The·exit·is·
     to·the·····north."
AFKF 1090·DATA·"You're·in·your·bedroom.·It's·
     an·utterly·disgusting·tip·of·a·place.·Di
     rty·coffee·mugs·everywhere,·bits·of·comp
     uter·and···motorbike·all·over·the·floor.
     ·It's·an···outrage.·You·can·leave·by·goi
     ng·north,··and·maybe·you·should."
EAKA 1100·'·Go·North
FBND 1110·IF·acc(loc,1)<2·THEN·PRINT·"···I'm·
     sorry·Dave,·I·can't·do·that.":RETURN
DAOP 1120·loc=loc-4
DAOB 1130·GOSUB·810
CAGM 1140·RETURN
EAHB 1150·'·Go·South
FBEE 1160·IF·acc(loc,3)<2·THEN·PRINT·"···I'm·
     sorry·Dave,·I·can't·do·that.":RETURN
EABA 1170·loc=loc+4
DADC 1180·GOSUB·810
CALM 1190·RETURN
DANI 1200·'·Go·East
```

Consider this simple washing machine...



"Oh what? He hasn't done all the uses of all the objects! And the cheeky little so-and-so expects honest, decent, hard-working folk like me to sit and program things like the washing machine! How on earth am I ever going to do really difficult stuff like that?"

Oh, stop being so childish – it's really quite easy. All you have to do is wait 'til the player is standing in the launderette, and wants to use the washing machine. There are two ways you can approach this whole washing machine deal:

1 The player has to go to the launderette, and carry out the following actions:

USE LAUNDRY
USE CLOTHES
USE MONEY
USE POWDER

But it all gets a little silly, and will make people's faces curl if they've got to figure out that kind of thing. It's just not fair on anyone to expect them to work out stuff like that – it's where a completely useless parser poses more of a problem than the actual features of the game do.

2 Have one command like...

USE MACHINE

...on the execution of which, the program will check that the player is carrying some money, both bits of laundry, and finally the powder, and if so, your clothes will be washed. It's really very simple to program in the end, as it's just one extra USE command.

Lines 1300-1450

This is the routine for taking objects. It's basically a very simple routine and carries out these few basic checks:

1 That the object to be taken has actually been stated.

2 That the object exists.

3 That the object is in the same location as the player.

4 That the object can actually be lifted.

If all these checks are positive, the player will then be carrying the specified object. At each level, though, if something goes wrong, the user will be presented with an appropriate comment, insulting or otherwise.

The one check I've omitted from this routine is a weight check (as opposed to just a carryable check). This is to keep things simple and make sure the game is actually playable before it is inserted. I'll provide you with the routine to sort this all out at a later date if you're either not willing or not able to write your own (it doesn't really matter which – we all have to be beginners some time), but for now, we'll leave that part out to make the game a little more easy.

```
FBPD 1210·IF·acc(loc,2)<2·THEN·PRINT·"···I'm·
     sorry·Dave,·I·can't·do·that.":RETURN
DAKP 1220·loc=loc+1
DAPB 1230·GOSUB·810
CAHM 1240·RETURN
DAIK 1250·'·Go·West
FBGE 1260·IF·acc(loc,4)<2·THEN·PRINT·"···I'm·
     sorry·Dave,·I·can't·do·that.":RETURN
EABA 1270·loc=loc-1
DAEC 1280·GOSUB·810
CAMM 1290·RETURN
```

```
NAFK 1410·PRINT·"···Idiot·-·you·can't·pick·th
     at·up!"
CAHM 1420·RETURN
EAGP 1430·obj$(so,3)="255"
JBLX 1440·PRINT·"···You·take·it,·and·subseque
     ntly·you·arenow·carrying·";obj$(so,1);".
     "
CAKM 1450·RETURN
FAOF 1460·'·Drop·object
OAAK 1470·IF·w<2·THEN·PRINT·"···Stop·being·si
     lly.":RETURN
```

Lines 1460-1550

Here we have the dropping routine, for getting rid of objects that are no longer needed. We're carrying out checks here, as well:

1 That an object was actually stated.

2 That the object exists (I've got this weird feeling of deja vu!).

3 That the player is carrying the object (otherwise they'd be able to drag any object they need from any location into their current location simply by dropping it).

And I reckon that's about all anyone ever needs to know about dropping objects.

```
FAHC 1300·'·Take·Object
JBMA 1310·IF·w<2·THEN·PRINT·"···Stating·an·ob
     ject·would·be·a·really··wise·move.":RETU
     RN
EAEI 1320·FOR·so=1·TO·13
NAGH 1330·IF·UPPER$(w$(2))=UPPER$(obj$(so,2))
     ·THEN·GOTO·1370
DAJC 1340·NEXT·so
NCFO 1350·PRINT·"···I'm·really·sorry,·but·I'm
     ·not·even···sure·if·I·know·what·one·of·t
     hose········actually·is,·let·alone·wheth
     er·or·not···to·take·one!"
CAKM 1360·RETURN
KAHM 1370·IF·VAL(obj$(so,3))=loc·THEN·GOTO·14
     00
NBMJ 1380·PRINT·"···Sorry·n'all,·but·I·can't·
     find·one·of·those·around·here·anywhere·-
     ·try·again."
CANM 1390·RETURN
JAIL 1400·IF·VAL(obj$(so,4))>0·THEN·GOTO·1430
```

```
EALI 1480·FOR·so=1·TO·13
NALH 1490·IF·UPPER$(w$(2))=UPPER$(obj$(so,2))
     ·THEN·GOTO·1530
DAHC 1500·NEXT·so
IBOF 1510·PRINT·"···I'm·not·even·aware·of·the
     ·existence··of·such·an·item,·sirrah!"
CAIM 1520·RETURN
ACNI 1530·IF·obj$(so,3)<>"255"THEN·PRINT·"···
     Nice·try,·but·you're·not·actually····car
     rying·that,·are·you?":RETURN
GAEM 1540·obj$(so,3)=STR$(loc)
CALM 1550·RETURN
DAKP 1560·'·Examine
PAND 1570·IF·w<2·THEN·PRINT·"···Examine·what,
     ·pray?":RETURN
EAPI 1580·FOR·so=1·TO·16
MANH 1590·IF·UPPER$(obj$(so,2))=UPPER$(w$(2))
     ·THEN·GOTO·1630
DAIC 1600·NEXT·so
JBML 1610·PRINT·"···Nice·try,·no·dice·-·no·su
```

Lines 1560-1680

It's those oh-so-familiar checks for the examine command, as well, to make sure that:

1 That an object was stated.

2 That the object exists.

3 That the object is in the same room as the player, or in their pocket.

And if those three check out, the program can go ahead and print the description.

```
     ch·thing····exists·as·far·as·I'm·concern
     ed!"
CAJM 1620·RETURN
JANB 1630·IF·obj$(so,3)="255"THEN·GOTO·1670
KAAN 1640·IF·VAL(obj$(so,3))=loc·THEN·GOTO·16
     70
CBBE 1650·PRINT·"···Not·actually·possible·I'm
     ·afraid,·oldbean."
CANM 1660·RETURN
FAOI 1670·PRINT·obj$(so,5)
CAPM 1680·RETURN
GAEG 1690·'·Inventory·bit
JAIK 1700·PRINT·"···You·are·carrying·";
EAHB 1710·FOR·o=1·TO·16
KAHO 1720·IF·obj$(o,3)="255"THEN·PRINT·obj$(o
```

Lines 1760-1870

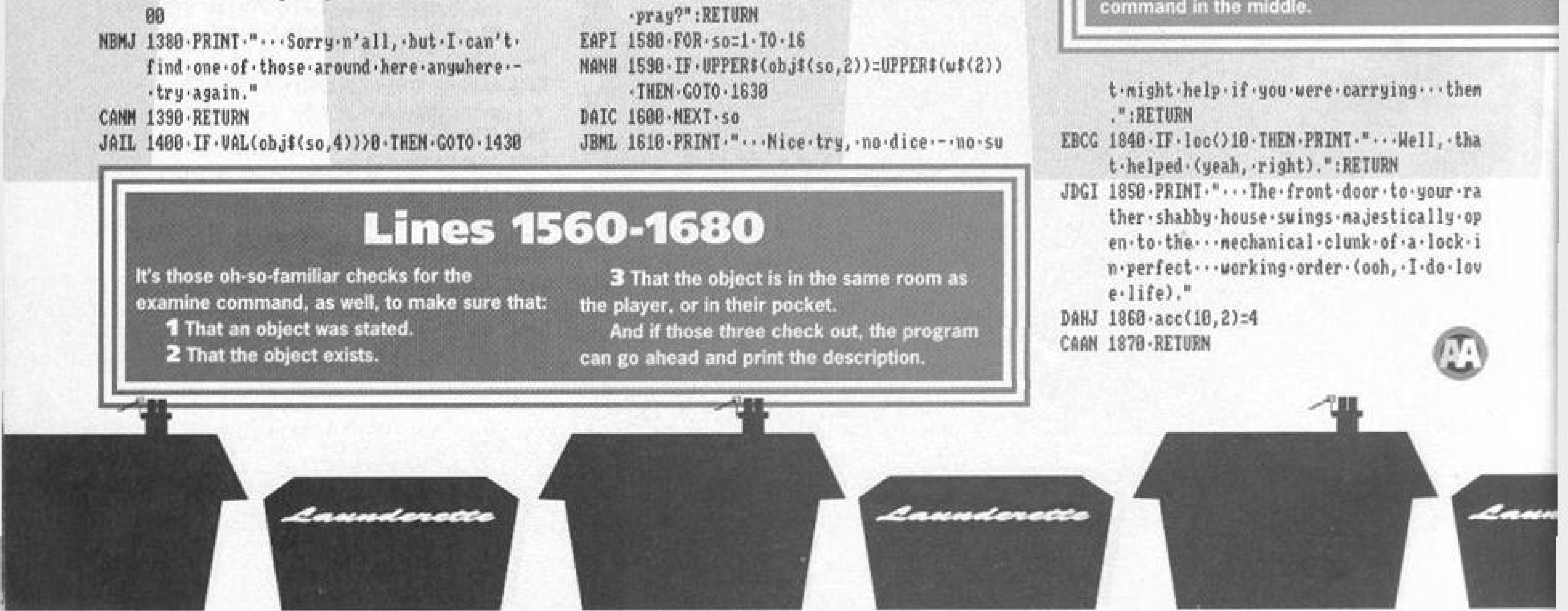
After the standard check to make sure an object was stated, control is passed over to a routine very similar to our parser – a series of branching statements to take us off to our particular use routines (each object has to have a separate routine, as the uses are all very different from one another, too different to have one general purpose routine – the washing machine behaves nothing like a set of keys, for example).

```
     ,1);
CAJL 1730·NEXT·o
CAJH 1740·PRINT
CANM 1750·RETURN
IAKD 1760·'·Use·Object·Selector
LAGE 1770·IF·w<2·THEN·PRINT·"···Yeah·Yeah·Yea
     h."
FAEF 1780·uo$=UPPER$(w$(2))
JAEI 1790·IF·LEFT$(uo$,3)="KEY"THEN·GOTO·1820
MAFM 1800·PRINT·"···Not·that·that·helps·at·al
     l."
CAKM 1810·RETURN
DAIM 1820·'·Use·key
JBMK 1830·IF·obj$(5,3)<>"255"THEN·PRINT·"···I
```

Lines 1690-1750

Here we have the inventory routine. It's dead simple, really, as it just flicks through the status of each object, printing its name if it's in location 255 (the user's pocket). As you can see, it's just a FOR/NEXT loop with an IF command in the middle.

```
     t·might·help·if·you·were·carrying···them
     .":RETURN
EBCG 1840·IF·loc<>10·THEN·PRINT·"···Well,·tha
     t·helped·(yeah,·right).":RETURN
JDGI 1850·PRINT·"···The·front·door·to·your·ra
     ther·shabby·house·swings·majestically·op
     en·to·the··mechanical·clunk·of·a·lock·i
     n·perfect···working·order·(ooh,·I·do·lov
     e·life)."
DAHJ 1860·acc(10,2)=4
CAAN 1870·RETURN
```



READER ADS

Miscellaneous

The Office Collection, all the best PD Databases, WP's, Spreadsheets, Disc Utilities, DOS', etc. Just send disc, SAE and 50p to David Crookes, 37 Trimingham Drive, Bury, Lancs, BL8 1JW.
CPC Undercover. A CPC Franzine with great coverdisc, superb value. Reviews, news, features and more for only 80p + SAE to David Crookes, 37 Trimingham Drive, Bury, Lancs, BL8 1JW.
Swap Soft 968 Firmware for 464/6128 plus Amstrad Assembly Language course by Glentop, disc version and 4 other books for Rombord with Photex or Second 3.5 Disc Drive. Why? Phone 0934 512609.
Any owners of Amstrad User issue 1 will get issue 4 or 5 absolutely free! For more info write to: Amstrad User, Brian Leaky, St Mary's Road, Kingscourt, Co Caven, Ireland. Tel: 042 67189.
Tuck-PD. Loads of top quality PD Software together with loads of second hand software. For details send and SAE to Matthew Tuck, 15 Ravencar Road, Eckington, Sheffield, S31 9GJ.
Star Trek, issue two of Enterprise Fanzine is now available. To order your copy just send 70p + second class stamp to: Enterprise 2 (AA), 1 Backdykes Terrace, Falkland, Fife, KY7 7BA
Enterprise, the Star Trek Fanzine, needs people who are interested in Star Trek to write articles for the Fanzine. If this is you, write to: Enterprise Writers (AA), 1 Backdykes Terrace, Falkland, Fife, KY7 7BA. The best article wins a Star Trek poster, so get writing!
Tape PD at great prices. Just send an SSAE to Power House PD, 5 Pentland Road, Slough, SL2 1TL for a free catalogue.
Hex Heroes PD Literary. Over 100 selections of to quality PD software (25p each). Send and SAE to 24 Woodend Lane, Stalybridge, Cheshire, SK15 2SR for a free catalogue.
Swap 59 cassette games, Amstrad Basic Tutorial Guide Part 1, Azimuth Head Alignment tape and Genisis Adventure Creation System for DD1 Disk Drive. Tel: 0243 603974.
I will swap the CPC games selection (Tabaruba, Shape + Sound, Superbest) for any good game. Tel: Paul 0664 61094 (Melbon Mowbray).
CPC Undercover, packed with top feature, tutorials and reviews. Coverdisc too. Send disc, SAE and 80p. Cheques payable to David Crookes, Quick Response, 37 Trimingham Drive, Bury, Lancs BL8 1JW.
Impact - the quarterly Disczine, packed with reviews, tips, etc. Issue one out now! Send 50p, a disc and an SSAE to : Impact, 53 High Lane, Burslem, Stoke-on-Trent, Staffordshire, ST6 7DF now!
Starting soon! Knights PD, a tape only library. We desperately need software. Write to: Tommy MacDonald (PD) 7 County Cottages, Piperhill, Nairn, IV12 5SC. Please enclose and SAE.
Homebrew Games in machine code, from Strategy to Shoot-Em-Ups, £2.50 plus disk or £4.99, great value. Kevin Heywood, 18 Sinclair Avenue, Banbury, Oxon, OX16 7DW.
CPC 464 keyboard plus MPI Modulator plus 50 games plus handbook, £100 or swap for compatible printer (not DMP2000) for CPC 6128. Tel: (Alloa) 0259 218954, between 5pm-10pm.
Image PD - over 100 selections, 50p per selection, send SSAE for disc list to Image PD, 15 Elmwood Drive, Ponteland, Newcastle-Upon-Tyne, NE20 9OQ.
Please swap my 10016 + weights and bars with York 1001 Home Gymm for your 6128 with working disc drive, ect. Contact Barry at 11 Harrowgate Road, Reddish, Stockport, Cheshire.

Services

CPC Lisitings with magazines permission, most not available in Public Domain. Games and graphics on 3" discs for £3.00 from Angela Allum, 22 Point Royal, Bracknell, RG12 7HH.
Textsheet 2 Text Editor for sale. Home programmed, includes spell checker, 1000+ lines to type in your text. Send Disk/tape + £2.00 to Alan Payne, 89 Wolverhampton Road, Codsall, Wolverhampton, WV8 1PL.
Ink Master 2 - gives 3380 colours on any Amstrad (not Public Domain), home programmed. For your copy send disk/tape and £2.00 to : Alan Payne, 89 Wolverhampton Road, Codsall, Wolverhampton, WV8 1PL.

Wanted

Wanted Amstrad CPC464 computer with leads for television, willing to swap new Nintendo, still boxed with four games, unwanted gift. Mrs M Hayes, 14 Guy Street, Higher Broughton, Salford 8, M8 7EJ.
Wanted on cassette: Rockstar Ate My Hampster and Football Director. Will swap for Turtles 2, Moonwalker, Vigilante and/or Operation Wolf. Tel: Little Mark 0493 603074.
Amstrad 464 plus colour monitor plus 100 games for Sega Mega Drive 16 Bit. Tel: Chris 0462 678134.
Colour Monitor for CPC 464. Will swap green monitor with small amount of money. I live in West Sussex and would like to view. Tel: Nick 0730 814622.
Wanted urgently: Penpal, 464 owner, male/female aged 11-14 to exchange games. Write to: mandy Todd, The Bungalow, Brickworks, Sumpter Way, Faversham, Kent, ME13 7NT - and please hurry.
Penpal wanted, male or female, 11-15 to talk about computers and games and talk in general. Write to Daniel Leddy, 17 Alexandra Road, Swindon, Wiltshire, SN1 1DB. I promise a reply.
Software for Public Domain Library, disk PD for a newsletter. Send £1 to Lower Dexbeer, Pancrasweek, Holsworthy, Devon, EX22 7LA or ring Paul 0288 82348.
MP-1 TV Modulator for CPC 464, will pay between £10.00-£15.00. Will pay postage. Tel: 0903 740203 (evenings only).
6128 (CPC or plus), just the main keyboard with built in disk drive (no monitor or add-ons). Tel: Andrew 0742 368489 (after 4pm).
Wanted for Amstrad CPC 464 any games for exchange or purchase, reasonable prices paid. Tel: Tamzin 0932 865685 (after 6pm).
Software needed! for new PD library. Tape or disc. Send software to: 3 Stonfield Road, Duston, Northampton, NN5 6EZ. Send SSAE if you want your work (with free game) returned.
Any of these: CTM644 Monitor, 2400 (+) Baud Modem, multiface, soft 967, soft 968, maxam, 3.5" disk drive. Jonathan, 124 Gosford Road, Armagh, BT60 2DE. Tel: 0861 507265.
Wanted for CPC 464 on cassettes games 'Sorcery', 'Rollaround' to buy or swap. Write to Mrs ZJ Gibbs, 3 Woodfield Drive, Sawtry, Huntingdon, Cambs, PE17 5TZ.
Public Domain wanted, anything from utilities to games. Please send them to Caernarfons only PD Library, Castle PD, Castle Square, Caernafon, Gueynedd, LLSS 2NN, c/o DJE.
Wanted desperately: Rainbird's Advanced Music System on disc (boxed). Will swap for Lemmings and Equinox (the game) both on disc. Tel: Jonathan 0663 744863 (after 4.20pm).
Any type of Managerial or Strategy game for 464 cassette, send list and price to Terry Evans, 2 Chiltern Close, Westminster Park, Chester, CH4 7QZ.
Wanted Illustrated Locoscript by Susan Rogers, also copies of Amstrad PCW 8000 Plus. Tel: George Fryer 0934 628080 (anytime).
PD software wanted for new tape only PD library. All contributions returned, 464 PD, 19 Cherry Gardens, Bishops Waltham, Hants, SO3 1SD.
Wanted for Amstrad CPC 464 TU modulator. Will pay any reasonable price. Tel: Esther 0843 226800.
RT Smith Compendium or any CCS games, Desert Rats, Avalanche, on tape for cash. Write to Mr SN Stone, 158 Braham Drive, Harrogate, West Yorks, HG3 2UB.
Chess games on disc for 6128 wanted. Tel: Abu 0297 553451 (anytime) or write to 38 Courtenay Drive, Colyton, Devon, EX13 6QB.
Urgently wanted Scrap Citizen 120D printer or print head with pins inside, will pay reasonable price. Please phone 0623 660022 (anytime).
Public Domain contacts wanted to swap PD on cassette/3.5" disc. No 3" discs please. Immediate response. Send all your software to Stuart McNaughton, 75 Nightingale Road, Edmonton, London, N9 8PX.
MP3 TV Tuner for CPC 6128 wanted urgently. Tel: 081 523 2438 or write to Mr M Stow, 12 Pasquier Road, Walthamstow, London, E17 6HB.
Starquake, revolution and Lemmings. all disc, swap for Elite, Switchblade and Space Crusade, all disc. Tel: Tim 0533 628272 (after 4pm).
Public Domain wanted, for the Amstrad 6128-664 or 464 with DiscDrive, anything from utilities to games for Arend-Castle PD. Write to : Mr DJ Evans, Castle PD, Castle Hotel, Castle Square, C/fon, Gwynedd, LLSS 2NN.

Wanted

Amstrad CPC 6128 colour monitor manual, two joysticks, 60 disk games, cassettes, disk inc. Starglider Harrier, Air Sea Supremacy, Pawn Art Studio, excellent condition, bargain at £100. Tel: Gary 0634 370523 (Kent).
6128 Keyboard, offers. Amx mouse and interface £25. Brunword, Elite £45. OCP Art Studio £10. Lots of games plus blank disks £10. All above for £75 the lot. Tel: 0304 831884.
Amstrad CPC 464 with green screen, joystick, MP1 adaptor, 64k memory expansion, 40 games, 30 copies or Amstrad Action with cover tapes, £125. Tel: 0772 700319 (after 6pm).
ACU plus CPC Attack mags: March '90 to Oct '92, 40p each plus SAE big enough for the mags to: P Adkins (Mags), 34 Sedgley Close, Abbeydale, Redditch, Worcs, B98 8JP (give alternatives).
Amstrad 6128 colour monitor, joystick, 165 games, programs include North/South, Final Fight, Tasword, AA65-95, all covertapes, leads for cassette manual. Also drum kit and GAC, good condition, sell for £225. Tel: Mr Dunn 0274 675904.
CPC 6128 colour monitor, original discs and manuals, DMP 2000 printer, Firmware manual, lots of games and software on disc and tape, ACU mags 10/85-2/89. Best offer. Tel: 021 350 6972.
Amstrad CPC 464 Colour Monitor joystick, over 50 games, £100. Tel: 0689 855164.
Amstrad CPC 6128, CTM 664 Colour Monitor, stop press, Advanced Art Studio, loads of games, other software, magazines and peripherals, complete with joystick and mouse plus table, £399 ono. Tel: 0234 870571.
Amstrad PCW 9512 superb condition with dust cover, only £120. Tel: 0883 715193.
Amstrad CPC 464 colour monitor, 28 games, 2 joysticks, tape drive, good condition, £100 ono, or all games £30. Tel: 0245 260397.
CPC 6128 colour siren 3.5" disk drive, Rombox, DTP, art and word processing software, mouse, some AA cassettes, some games, £235 cash. Tel: Andrew 0225 873200 (evenings).
Amstrad CPC 46C with colour monitor, manual, 2 joysticks, lots of games and a few Amstrad Action, excellent condition, £120. Tel: 021 311 1796 (Sutton Coldfield, Birmingham).
Will swap Moonwalker, Arkanoid, Who Dares Wins 2 and Turican 2 tape 464 for Lemmings or Bart v Space Mutants or Narc or Turtles Coin Op (tape). Tel: Glenn 0795 537942.
CPC 464, colour monitor, TV modulator, 2 joy sticks, Lightgun, approx 196 games, loads of AA's, dust covers, cassette racks, worth over £450, bargain at £150. Tel: 071 223 8678.
Amstrad CPC 464, colour monitor with over 200 games, and utilities, in perfect condition, comes with LC-20 printer also, £250 ono. Tel: David 0375 843096 (after school hours please).
Romantic Robot Multiface two plus insider for Amstrad CPC 464, 466/6128 with instruction manuals for both, brand new, still boxed, £30. Tel: 0902 630532 (Willenhall, West Midlands).
Amstrad CPC 6128 colour monitor, tape deck, multiface, mouse, second drive, software including Stop Press, Art Studio, games, good condition. Worth £1500, sell £400 ono. Tel: (Cheltenham) 0242 520026 (after 6pm).
Amstrad CPC 6128, colour monitor, tape recorder, manual, AA mags plus covertapes, approx £300 of games, word processors including Mini Office. Will accept £250. Tel: (Kings Lynn) 0553 772527.
Amstrad 464 green monitor, games £80. Amstrad 6128 green monitor, £90. Tel: 0892 523284.
AA's 68 to present, ACU March 1991-may 1992. Also many other computer magazines including Zzap 64, Commodore Format, Commodore Force and many others. Just £1 including any cover cassettes! Write to: Mr D Cockram, 9 Frome Gardens, Lowfell, Gateshead, Tyne & Wear, NE9 6UW.
DDI with CPM2.2 and interface, manual, vgc, £70 ono. 464 keyboard only, vgc, £35ono. Tel: Exeter 0392.
Amstrad GX4000 with all leads and adaptor plus two joypads and Burning Rubber, £25. Please contact Simon at 9 Raynville Green, Bramley, Leeds, IS13 2QF.
Cheap games on disc and cassette from £1. 6128 and mono monitor £60. 3D construction kit, Sprites Alive, all originals, Multiface 2. Send SAE for list to: W Learoyd, 105 Wellstone Avenue, Bramley, Leeds, LS13 4EH. Tel: 0532 572154.
Amstrad CPC 6128, keyboard, colour monitor, TV converter, radio, clock, desk and loads of games. Also mouse with art package and light pen. £250 ono. Tel: Clive 0442 823072 (W Herts).
Amstrad CPC 6128 green monitor, second disc drive FDI, £150. MP2 modulator for 6128, £20. Rombox, £20. Tel: 081 890 1954.
Amstrad CPC 6128 in perfect condition with green monitor and MP2 TV modulator. Also includes games, business software and AMX art with mouse. Will sell for around £300. Tel: Dan 0757 706881.
Amstrad 464+, hardly used, mint condition, two cartridges, 20+ tapes, one joypad, one joystick, colour monitor, manual, worth £600+, sell for £250 ono. Tel: Martin 0767 691829 (after 6.30pm).
Amstrad CPC 6128 and CPC 464 computers, green screen monitor, advanced art studio, Tasword, Maxam, cassette and disk games, mouse, various Amstrad Action magazines, excellent condition, £150. Tel: 0203 388519.
Amstrad CPC 464 with over 150 tape games, mono monitor, TV modulator, manual, joystick only £90 one. Tel: Sam 0248 351282 (North Wales).
Mini Office II (disc) £10, Masterfile III for CPC 6128 £15, Hisoft Pascal 80 £15, Amstrad MP-2 TV modulator £16, all plus p&p. Tel: Alex 0253 53024.
Software on disc for CPC singles and compilations from £1.50 each, all genuine. Tel: 021 706 0992 for list.

Continued on page 38 →

Public Image

It's hello and goodbye, as Tim Blackbond hands over the Public Domain reviewing reins to Keith Woods.

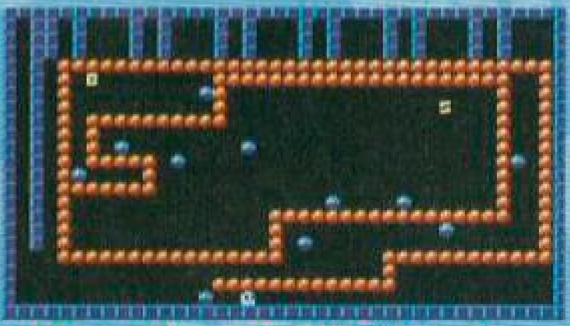


Crazy Snake

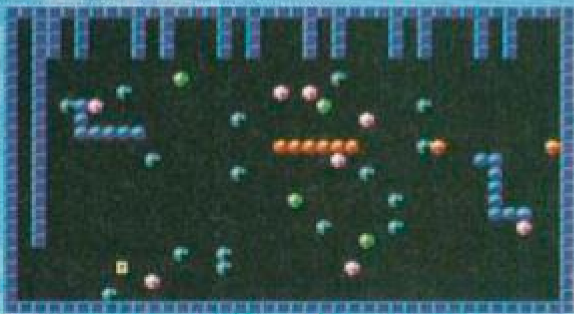
Programmers: Fraggle and Duck
Available from: PD Fun (GAM 12), 41 Michaelgate, Kirkby Lonsdale, Via Carnsfoth, Lancashire LA6 2BE.

What, you may well ask, am I doing reviewing yet another snake game? Sure, the PD libraries full of 'em, but haven't enough versions already appeared in these hallowed pages? (*'Hallowed pages'? You're just creeping 'cause it's your first issue – Dave.*) A-ha, that may be so, but *Crazy Snake* is a snake game with a difference!

First, for the one or two people who haven't got the foggiest idea what I'm talking about, the basic idea is that you control a snake which has to munch its way through a screen full of diamonds before it can progress to the next. The problem is, your snake's got no brakes, and unless you're quick, you'll find him wriggling his way towards the solid walls surrounding him, contact with which bring him to a very sudden halt.



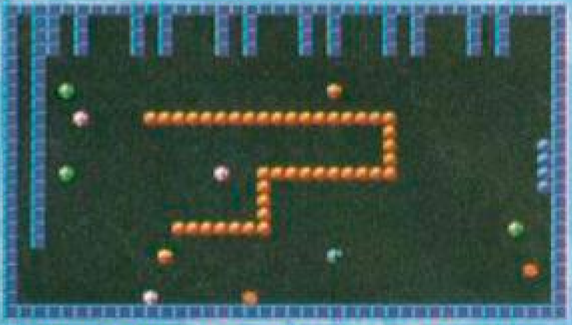
This snake obviously ignored his mum's advice about not wanting to grow up too fast.



Snakes are very misunderstood animals. Perhaps they should take elocution lessons.

To make things worse, contact with your own tail is also fatal. This wouldn't be so much of a problem if it wasn't for the fact that with every diamond swallowed, your tail grows, and with so many diamonds to be consumed, the reptile soon assumes extraordinary proportions.

But most of you know all that already. What you probably don't know is that *Crazy Snake* is the ultimate nake game. In addition to the usual features, as you progress through the 20 levels, you'll notice that not only does your snake accelerate up to breakneck speeds, he is joined by a wide variety of nasties that are determined to block his path. As well as that, there are different coloured diamonds which stretch his tail to various lengths and a vast array of bonuses to watch out for.



If you get bored with the game you could always try spelling out your name.

On the presentation front, this game boasts clear, colourful graphics, smooth animation, a whole host of excellent *Soundtrakker* tunes, full instructions and a permanent scoreboard. What more could you ask for?

There's no doubt about it, this game is head and shoulders above the competition. The only thing is that by its very nature, the gameplay is essentially limited and despite the 20 taxing levels, it lacks long-term playability. However, if you've yet to see a serpent on your screen, then this is the game to get. **Keith**

86%

BMP Convert

Programmer: Joker of BENG!
Available from Amsof PD (APS 20), Lissanly, Cloyne, Middleton, Ireland.

Wouldn't it be nice to design all your graphics with the power of a PC art package, and then transfer them to your CPC? Or even better, wouldn't it be nice to 'borrow' (ahem!) someone else's PC graphics and use them in your own CPC productions?

Well, thanks to the unstoppable Joker of the even more unstoppable BENG!, you can now do just that. BMP format screen files can be transferred, albeit only ones of no more than 16 colours (there are limits). Unfortunately, even when you do get your pictures down to just 16 colours, the program won't convert the colour data, so you have to reprogram the colours yourself.



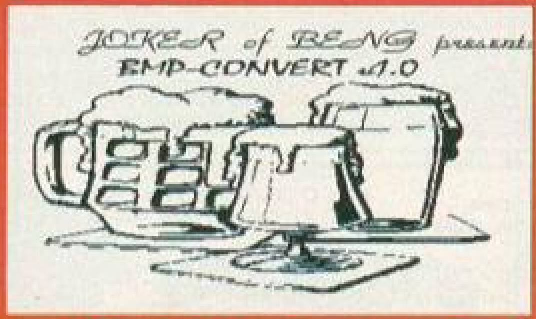
With BMP you can convert PC pictures into ones you can display on a CPC.

JOKER of BENG

The main program works simply enough. All you have to do is enter the filename, choose a mode and then specify x and y factors, which must be set to compensate for the PC's higher resolution. In addition, there's an example slideshow and full instructions, which unfortunately are in German, but are fairly easy to figure out.

Minor grumbles aside, this is a unique program that achieves its purpose very convincingly. And, at the cost of just one sixpack, it's an absolute giveaway! **Keith**

88%



Design images on a PC then convert them using BMP so that use them on your CPC.

Whack Attack!

Programmer: David Hall
Available from: MPD Software, 23 Nobes Avenue, Bridgemary, Gosport PO13 OHS

Ever played those games in an arcade where you have to bash things over the head with a mallet? Then this game'll be familiar. Moles' heads pop up from one of nine holes, and by using the numeric keypad it's up to you to bring your hammer down on their heads in the nicest possible way.

Look out, though! Moles aren't stupid (short-sighted, but not stupid). They don't stay above ground forever; in fact, if just one subterranean mammal emerges and survives, your game ends. It's a good test of the old hand-eye co-ordination.

With 255 speed levels, even the fastest keyboard experts will be shot down in the end. Unfortunately, the gameplay wears very thin when you discover that all you are going to be doing for the next four days is hammering helpless animals. **Tim**

62%



Moles? Ppphhh...! Pesky little things, digging holes all over yer garden...

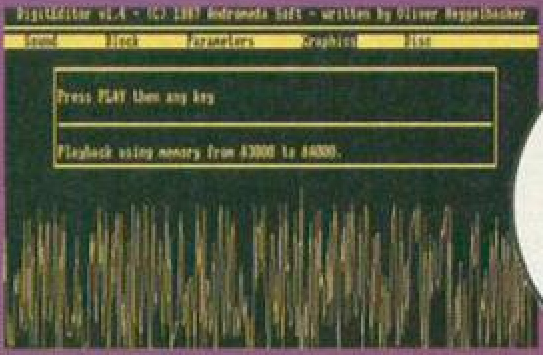
DigitEditor

Programmer: Oliver Heggelbacher
Available from: DEMON PD, 47 Hilton Avenue, Hall Green, Birmingham B28 0PE

Soundtrakker is a great music program for those who are musically talented. But not everyone's a genius with a piano, are they? Wouldn't it be a lot easier if you could just sample somebody else's hard work and loop that?

I'm going to surprise you now. You can. Out of the many sound digitising programs that have appeared on the CPC, *DigitEditor* is by far and away the best. When loaded, the main screen gives you the choice of no less than five sub-menus. Throughout these is a library of options allowing sound to be played back at a variety of speeds and volumes, even backwards (you really should hear the subliminal messages on Rolf Harris' version of *Stairway To Heaven*, you'll never see Australia's finest TV funnyman in the same light again...).

What's more, a massive 16 seconds of sound can be crammed inside the memory limiting the program only by your imagination. Nearly.



Just by looking at the graph, it's easy to see that the tune is none other than Temple Of Love by The Sisters Of Mercy! Unmistakable...

Unfortunately, owing to the CPC being only a humble machine, it does have a few limitations. For example, it would be unfair to expect the poor chips to handle Iron Maiden at full blast; the sound quality is a little crackly even with Nick Berry (er, so I've been told...).

For the demo-coder looking for a smart little talky-bit, *DigitEditor* really is the top dog, but to my knowledge, there are no music programs that allow digitised sound to be incorporated into a tune. Sorry. **Tim**

82%

Galaxians Revenge

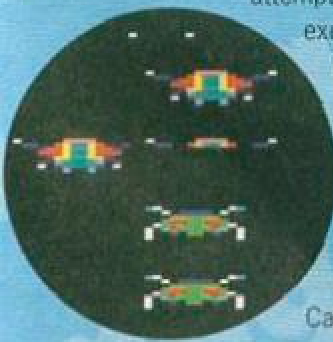
Programmer: KN Khaleque
Available from: GD PD Software, 49 Woodville, Barnstaple, N Devon EX31 2AY

Do you ever find yourself sitting in front of the television on a Sunday afternoon watching *Songs of Praise* because there really is nothing better to do? The chaps aboard the SS Galactica are no exceptions to the Sunday-bug, and so Captain C Thackery (Space Adventurer), in an attempt to bring a little excitement to on-board life started playfully firing missiles at groups of aliens just for the hell of it. It was only when the aliens decided to fight back that Captain Thackery (Space Adventurer) found himself in deep trouble (the aliens didn't find his excuse that he was driven to his actions by *Songs of Praise* very convincing).



These Galaxians have been using the same attack formation for years and they're still suffering heavy losses.





Yes, *Galaxians*. The ancient arcade game that took *Space Invaders* to a new level of aggression in the early 80s. Well, why pay money for expensive arcade games when there's perfectly good products in the Public Domain? The sprites are well designed, they move smoothly and the game runs at a reasonable speed. What more could you ever want? Even though the game does get a tad repetitive, it still costs 14 times less than *Super Space Invaders* from Domark, and it's so much better. Sundays need never be dull again (well, not for a while, anyway). **Tim**

80%



And we wonder why aliens have never bothered visiting Earth...

Hi there

Although this isn't my first appearance in Public Image, it's my first time writing it. I'll be penning this particular article from now on, so if you want me to review any of your PD or fanzines, or would just like to write me a letter, then drop me a line and I'll see what I can do. The address, as always, is: Public Image, *Amstrad Action*, 30 Monmouth Street, Bath BA1 2BW.
Keith Woods

Dizzy Starline and the Gowong Computers

Programmer: S. Mitchell
Available from: PD Fun, 41 Michelgate, Kirkby Lonsdale, Lancs LA6 2BE.

Strange title, huh? Strange game! Intergalactic Gowong Incorporated have a small problem on their hands. There are no less than 49 sectors in one solar system each wanting a consignment of Gowong Computers. No problem, just fly the goods in with the latest hi-tech Space-Warp Drive™.

Problem two: all the computers need to be delivered in 49 days and the WarpDrive™ needs exactly one day to travel from sector-to-sector. Simple – just enough time to get them all delivered and be home in time for the football season.

Problem three: four of the sectors have been promised set days on which the delivery must arrive. No sector can be visited twice and the WarpDrive™ is only a prototype and can only move like a rook chess.

The 49 sectors are situated on a 7x7 grid. You must hop around the grid, delivering computers and hoping that you are positioned well enough to get to the deadline sectors on the right stardate. There's only one puzzle and very few solutions among the billions of wrong ways to complete the game, so before you give up completely those grey cells are going to get a bit of exercise.

Sadly, when you've completed it, you'll never touch it again. Until then... let's just say Nurofen sales will increase dramatically. **Tim**

72%



Deliver the goods, keep to deadlines and move in a silly manner. It's rather like being a journalist, in fact...

Smile again...

Join us next month when, among others, we'll be taking a look at Crown's new *Protracker* music utility and *Jumpmania*, a new game from Fraggle, a puzzler starring a Smiley (*hang on, didn't we do that last month? – Dave*). Nope, this is another puzzle game starring a Smiley.

Reader Ads

(Coninued from page 35)

Amstrad CPC 464 colour monitor plus extras £99, Amstrad games on tape and disk from only 50p. For full list send SAE to: Michael Carter, Bradda, Crowborough Road, Georgeham, North Devon, EX33 1JZ. Do it now!!

Amstrad CPC 6128 with colour monitor, manual, over 75 games plus Mini Office II, also datacorder with leads, £105. Buyer collects. Tel: 0752 367344 (Plymouth).

Games on disc and cassette CPC 6128 with mono monitor £80.00, lightgun, Speech, Multiface II, Stop Press, Sprites Alive, Mini Office II on disc, send SAE for list. Contact Wayne, 105 Wellstone Avenue, Bramley, Leeds, LS13 4EH.

Amstrad 6128 colour monitor, printer, disc drive, tape deck, multiface 2, joystick, word processor package, 50 games - disc and tape, all manuals, leads, £150. Tel: Niel 061 789 6693.

DDI-1 disc drive and 64k expansion for sale - please ring to arrange prices. Also Advanced Art Studio (tape - £9) and Mini Office II (tape - £4). Tel: 0480 860845.

Amstrad CPC 6128 monochrome: 45 games, secon drive (3.5"), MP2 modulator for use with colour TV, joystick, 20 Amstrad Action magazines, Tasword 6128 word processor, £220 or make me an offer. Tel: Robin 0222 580221, ext 345 (office hours.

Amstrad CPC 6128 colour monitor with games, 2nd disc drive, printer, multiface II, memory expansion, 2 joysticks, mouse, excellent condition, £250 ono. Tel: Matthew Ward (Hull) 564998 (after 6pm).

Amstrad CPC 6128 colour monitor with games, second disc drive, printer, Multiface 2, a memory expansion, 2 joysticks, mouse, excellent condition, £250 ono. Tel: Matthew 0482 564998 (after 6pm).

CPC 6128, mono monitor, additional 3.5 disk drive, rom box, DMP 2160 printer, all with manuals, some good business software, all in good condition for £200. Tel: 0924 863294.

Amstrad CPC 464, 50+ games. loads of AA tapes, colour monitor, mint condition, £150 ono. Tel: 0424 446779 (Hastings on South Coast).

CPC 464 colour monitor, two disc drives, 64k RAM expansion, Multiface two, £800 worth of games, many extras, AA magazines, £300 ono. Printer optional. Tel: Gordon 0655 82639 (after 5pm).

Ready to go! CPC 6128 (colour), extra ROMS, 3.5" drive, Multiface, Soundblaster, many utilities and games, £375 ono. For more details, SAE to John Hawkins, 10 Twinwoods, Stevenage, SG1 1RJ or ring 0438 353196.

Disk games - all types, 9 individual boxed, £3 each, £25 together. 5 compilations - various prices. 20 formatable blanks, £6 for 10. James Rawling, 3 Elmore Row, Bloxwich, Walsall, WS3 2HR.

Loadsa software on discs and cassettes both serious and games, many titles including Protext, Elite, Art Studio, Lemmings, etc. Send SAE to Paul, 5 Temple-Pattle, Brantham, Manningtree, Essex, CO11 1RW, for list.

Amstrad CPC 6128 with colour monitor and TV modulator. 23 discs containing 42 games, 15 cassettes containing 36 games, joystick, CP/M discs, disc box, manual and book, AA magazines, £220 ono. Tel: 0235 526106.

Barcode Battler, very good condition, paid £40, sell for £25 ono. Interested? Tel: James 0827 282193.

Amstrad CPC 464+, 64K memory, colour monitor, joypad, joystick, 200+ tapes, 20 Amstrad Action mags, £300 ono. Tel: Andrew 0707 339283 (after 5pm).

For sale Masterfile III, Mastercalc 128, Protext, OCP Art Studio inc Mouse, Multiface two, all for 6128 disk. Tel: Graham 0782 314527 (Stoke).

Amstrad 40025 chip (6128 ROM), upgrade for CPC 464 unused, unopened with fitting instructions, 6128 basic commands on 464, £15 ono. Tel: Bruce 0960 373782 (evenings).

Amstrad CPC 464 colour monitor, manual, AA's 72-97, covertapes and over 100 games, joystick, footpedal, desk, software storage boxes, everything in excellent condition, £220 ono. Tel: Est 0742 619674 (Sheffield).

Amstrad CPC 464 colour monitor, 90 games, £140 ono. Tel: 0279 420619.

3D Construction kit boxed with video and instructions, £10. Advanced Art Studio, boxed, £10. Multiface II with instructions, £20. Tel: Robert 0923 671162 (Hertfordshire).

3-inch disks, £1 each, used, hence half usual price, but now blank and formated, limited number. Write only to: D Barrett, 3 Russet Close, Swanmore, Southampton, Hants, SO3 2RU.

Amstrad 464, colour monitor, joystick, over £350 worth of games like Titus and Lemmings, etc., a few AA mags with covertapes included, great condition and bargain at only £350 ono. Tel: 0463 81 520.

18 Sega Game Gear games, wide range, all with box and instructions and in very good condition, £15 each ono. Also 4 Master System games, £18 each ono. Tel: 061 969 1847.

Amstrad CPC 464 with green screen monitor, manual, joy sticks, some games, Amsoft word processor, Mini Office II, £65 o.n.o. DMP1 printer with manuel paper, spare ribbons, £45 ono. Lot £95. Tel: Fred 0604 585525.

CPC 6128 computer with colour monitor, tape deck, joysticks, 20 games plus Mini Office II, user manual, computer desk, all very good condition, real bargain at £145 o.n.o. Tel: Tim 081 657 2795 (evenings or weekends).

Amstrad CPC 6128 colour monitor, modulator, tape recorder, 150+ games disks and tapes, 2 joysticks, Amstrad user manual, 20 Amstrad Action mags, cover tapes, £275 Tel: 0582 503693 (Luton).

Original release cassettes inc. Gryzor, Lotus Turbo Challenge, Toma Hawk, Starglider, for sale. Phone for list. Tel: Roger 071 822 3727.

Loads of taped original games for sale including Klax, Winter Games, Countdown, Sailing, Miami Cobra; or exchange several for disc based. Also manual Amstrad Microsoft GW-Basic. Tel: Rita 081 422 5372.

CPC 6128 with Rombox 5.25" drive, Multiface II, data recorder, disc and cassette software (lots), AA mags (lots). Tel: 0656 768294 (evenings). P.S: Make me an offer. PPS: I have a service man as well.

CPC 464 colour monitor, manual, 3 years of AA, around 120 tape games, some educational, all fully boxed, excellent condition, the lot for £250 o.n.o. Tel: Gavin (0344) 52680

CPC 6128 colour monitor, over 50+ disks including Mini Office, F16, Lemmings, Trivial Pursuit, over 40+ AA magazines including cover tapes. Joystick, manual, dust covers. Mint Condition, £250 Tel: Kevin 0795 530780.

Amstrad PCW8256 Green monitor, printer, spare ribbon, manual, CPM/Systems disc, Locoscript, Locoscript 2 with Spellcheck, Supercall 2 software, five spare discs, upgrading forces sale, £280 o.b.o. Tel: Tracy 0642 533005.

DDI-1 disc drive with interface/CP/M disc/manual/26 games £80. Multiface 2 with insider £20. DKTronics 64k memory expansion £25. All as new. Tel: Wolverhampton Tel: 0902 762154.

CPC 464 with green monitor, DD1 disk drive, TV modulator, black ash effect computer table, software and manuals, V.G.C., £130 Tel: (Cheltenham) 0242 521696

Software! Games, utilities, tapes, disks, also lightpen. For list write to: 30 Bumedge Fold Road, Grasscroft, Oldham, Lancashire, OL4 4EE, or ring Mark Coverdale 0457 875894. Also Amstrad control pad, manual.

For sale CPC 464 games. For a catalogue send a stamped address envelope to Steven Williams, 9 Graig, Wen Pen-y-Graig, Llanelli, Dyfed South Wales, SA14 9PB

Science Calculator. Has 16 different features, home progammed. The best for your senior school child, can be used for revision. Interested? Send £2.00, SSAE, Tape/to 32 Crichton Avenue, Wallington Surrey, SM6 8W

CPC 6128 with colour monitor, mirage imager and real time clock peripherals, external tape recorder with lead software (including Mini Office 2) on discs, manuals, £140 ono very good condition. Tel: Cheltenham - 0242 521696

464 tapes £3 each, Wulfpack Cobra Force, Escape Singh's Castle, Spytrek Adventure, Quick Draw McGraw, Hong Kong Phooey, includes P&P. Write to: Mr D Gillespie, 439 Killinghall Road, Thornbury, Bradford, West Yorkshire, BD2 4SD

Commodore 64 with datasette £50, needs attention. Atari 800XL with datasette and games £50, needs attention. Commodore datasette £25. Commodore 64 manual £5 includes P&P, manual only. Buyer collects equipment. Write to: Mr P Gillespie, 439 Killinghall Road, Thornbury, Bradford, West Yorkshire, BD2 4SD.

Amstrad CPC 6128 without moniter, loads of games/utilities, tape recorder, manual and 20+ magazines. Also Amstrad GX4000 games console with 'Burnin Rubber' and 'Klax', all offers considered. Tel: 0480 472923

256K expanision Ram (DK Tronics) with RSX disc £80. Tel: 0404 441154 (after 6pm).

Atari 600XL with two tape recorders leads and powerpack £40 o.n.o. Ask for Alan Tel: 091 5497407

Amstrad CPC 6128 with mono monitor and modulator, various games and utilities (Mini Office, Money Manager), info books and original manual, £100.00 ono.

READER ADS

ORDER FORM

SEND TO: SMALL ADS, AMSTRAD ACTION, 30 MONMOUTH STREET, BATH, AVON BA1 2BW

Please place the following advertisement in the next available issue of *Amstrad Action*

Name ______________________

Address ______________________

____

____

FREE READER ADS!

It's true – you can advertise in Amstrad Action for NOTHING! It's all part of our continuing efforts to provide you with the best value magazine possible.

Classification. Tick box: ☐ For Sale ☐ Wanted ☐ Services ☐ User Groups ☐ Other

Write your advertisement here, one word per box. Include your name and phone number if you want them printed.

Further reading...

While we're on the subject of fanzines (well, we were 27 pages ago anyway) Dave took the opportunity to write a fanzine review page that wasn't called Zine Scene.

WACCI



- PRICE: £1.50
- EDITOR: Clive Bellaby
- ADDRESS: 12 Trafalgar Terrace, Long Eaton, Nottingham NG10 1GP
- CONTENTS: 28 pages of programming tips, how-to guides, in-depth serious reviews and a letter page that just seems to go on and on and on and on an on and on...
- DESIGN: A4. Austere is the first word that springs to mind. Functional and tidy, but hardly the most inviting 'zine.
- COMMENTS: The CPC programmers' almanac. If you're a serious CPC tech-head WACCI is a truly meaty read. It has a rather self-reverential attitude and keeps slagging off AA for some unknown reason, but you can't deny that on the technical side it delivers the goods. To get WACCI you need to subscribe, but this fee also allows you access to the WACCI PD library.
- READ THIS IF... you can find your way around the intricacies CPC quite happily, but only using the short cuts, and you'd really like to take in a bit more of the scenery, okay?

Alive and Kicking



- PRICE: £1.20
- EDITOR: Lee Rouane
- ADDRESS: 3 Causeway House, Kelstedge, Ashover, Chesterfield S45 0DW.
- CONTENTS: Games, games and more games (and a couple of other things)
- DESIGN: A4. Without doubt the best-designed CPC fanzine (although the cover's a bit rubbish).
- COMMENTS: None of the games covered are new, and I can't fathom out any logic behind why what gets reviewed gets reviewed, but it's great to dip into and see whether the reviewers' opinions are inspired or a load of drivel (whether they agree with you or not, in other words).
- READ THIS IF... you like reading game reviews.

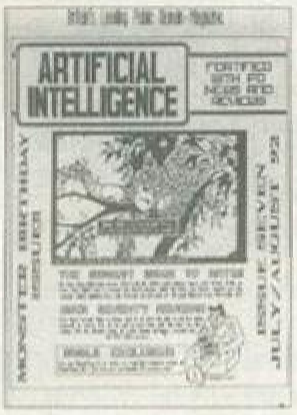
Amszine



- PRICE:
- EDITOR: £1 Jonathan Brumhead
- ADDRESS: Gayton, Laneside Row, New Mills, Via Stockport
- CONTENTS: Games, games and more games (er, this sounds familiar)
- DESIGN: A4 (paper but the pages seem to have been designed for A5). Impressive page lay-out and excellent mono screen grab reproduction.
- COMMENTS: It's very similar to Alive and Kicking except there isn't as much of it.
- READ THIS IF... *Alive and Kicking* doesn't satisfy your game review hunger.

Artificial Intelligence

- PRICE: 70p
- EDITOR: Tim Blackbond
- ADDRESS: 19 Lee Street, Liversedge, West Yorkshire WF15 6DZ



- CONTENTS: 32 pages of just about everything. In fact anything goes. Heavy on reviews, plus user guides, an excellent letters page and adventure stuff. Just about everything, in fact.
- DESIGN: A5. Shows the impressive results you can achieve with CPC DTP package.
- COMMENTS: Wild, wacky and weird, AI is the funniest fanzine you'll find in these 'ere parts. Tim Blackbond and co-conspirator Rob Smith have produced a fanzine that bursts with the kind of quality Bernard Matthews tries to convince us his chicken breasts have (*and might well have – AA's libel lawyer*).
- READ THIS IF... you want a good laugh and you don't mind someone taking the mick out the CPC scene occasionally.

Potential Difference



- PRICE: 70p
- EDITOR: Chris Goodswen
- ADDRESS: 47 All Saints Drive, North Wooton, King's Lynn, Norfolk PE30 3RX
- CONTENTS: Loads of PD (reviews, features on libraries, interviews, etc), game reviews and even, gasp, hang the editor as heretic, non-computer features.
- DESIGN: Very distinctive, very different, trying to be stylish and almost succeeding.
- COMMENTS: The nearest thing the CPC has got to an *IQ/Arena*-type magazine in which style takes precedence over contents. It's actually a lot of fun, but quite weird.
- READ THIS IF... you fancy something a bit, well, different.

CPC Forever

Price: 50p (sort of)
Editor: David Crookes
Address: 8 Springfield Drive, Templeogue, Dublin 6W, Ireland.



From the man who brought you this...

COMMENTS: *CPC Forever* is a new concept in fanzines from the man who's been editing *Amstrad Fun* for the last few years, Keith Woods. Owing to publishing pressures (and exams) Keith has had to wind up *AF* but has promised big things for *CPC Forever*, which will come out whenever he gets a chance to produce it. The major innovation is that it'll be a freeware fanzine. In other words, Keith doesn't mind if you photocopy issues of the 'zine. If you want to order a copy from Keith directly, however, it'll set you back a mere 50p.

What'll it be like? Well, if it's anything like Keith's last 'zine *Amstrad Fun*, it'll be highly opinionated, have a strong bias towards a still-very-active European scene, openly contentious, well-written and not afraid to tell everybody how good it is.

- READ IT IF... you want to know what's happening on the European scene, but not if you're xenophobic.

CPC FOREVER

CPC Undercover

- PRICE: 80p
- EDITOR: David Crookes
- ADDRESS: 37 Trimingham Drive, Brandlesholme, Bury, Lancashire BL8 LJW



- CONTENTS: 16 pages crammed with an impressively wide agenda with a leaning towards the serious side of the CPC, with news, DTP tips and printer reviews plus games-related features and tips.
- DESIGN: A5, a bit cramped, but not bad.
- COMMENTS: A bit of a one-man show, with David Crookes doing just about everything in the first issue. Although there's nothing that makes Undercover essential reading, it's thoughtfully written and decent browsing material. Its major innovation is that it comes with a coverdisk... sort of. You have to send a disk with your order to get some PD software. Nice try. Basically a sound fanzine that needs time to develop a character (and readership).
- READ IT IF... a) you're new to the serious side of their CPC, b) you want to write for a fanzine and think you could help David out

Reaction

Send your letters to: Reaction, Amstrad Action, 30 Monmouth Street, Bath BA1 2BW

On your marks cassette, go

I have just read Reaction in *AA97* and feel I must respond to Richard Latham's letter, Get It On Tape.

As the librarian for the United Amstrad User Group, I would like to say that we have a comprehensive tape PD library as well as a large disk library. My job is to supply tape-only PD and I'm kept very busy transferring various disk-based programs to tape. Yes, it does take a long time, but I'm happy to do it. However, at present, I'm getting 20 to 30 requests a week, and I work full-time, so I am not able to send back tapes by return of post.

Membership details (£8 per year for the UK) are available from the Membership Secretary, Gordon Wooliscroft, 2 Wrenbeck Drive, Otley, West Yorkshire LS21 2BR. Please enclose an SAE.
Richard Duggan.

It's strange, y'know, but since that letter was published bemoaning a lack of tape PD we've not only had letters from existing libraries that supply tape-based PD, but we've heard of at least two new libraries setting up that specialise in the stuff. Funny old world, innit? Check out the Amscene Directory on page 7 for more details. **Dave.**

Not so green

It has recently come to my attention that the most fabu... fabuler... fa... great mag in the world is probably not environmentally friendly. But why, I hear you cry? Well, are you sitting comfortably? Then I'll begin.


Buy every copy of AA you can afford to give these trees' existence a sense of purpose.

While doing one of the most boring projects for college ever I came across a snippet of info that lead me to this conclusion. The waxy coating on all of the pages of this great mag means that 29 A3 pages of perfectly good paper cannot be recycled.

But why should people want to throw away their *AAs* in the first place, I hear you cry? Well, they don't. But as I am sure that you are aware any unwanted/unsold issues of *AA* are returned to the wholesaler/distributor.

Oh, that's all right, then. NO!

Where do they go from there? The dump? Tip? Furnace, even? I hope not. Please could you explain this to me as I might just have to take up the slack and buy all the unwanted issues... aaarrrrghhh!
Michael Wood, Farnborough.

What do you mean, left over copies? **Dave**

Downhill

I've been reading your mag for years and I've seen many changes, but in the last couple of months, I've been annoyed by them.

1 You only put two or three programs on the covertape each month. Take covertape 22 – it has six programs; two complete games, two utilities, POKEs, type-ins, etc. Compare it to tape covertape 28. See the difference? Tape 22 is is bound to be worth more than 28 and did they boast it all over the front cover back then? No. So take the hint.

2 Since there has been a price rise and the covertape hasn't improved, why not extend the magazine to 70 pages or 80 or even 94 pages just like issue 68, which even had a covertape and was only £2.20? Now that was excellent value for money. Get the message?

3 Why are you charging £7 for overseas orders for Back Issues?

4 When you reach issue 100 in December you better have a big celebration, whack two tapes on the cover, chock-a-block with games, etc. And why not bring back memories of 1985 and print the cover of issue 100 the same as issue 1 or have the same format as it did then?

I hope to see an improvement.

Please print my full address in case any Aussie users out there want to be pen-pals.
Chris Hine, 1 Valley Vista Road, The Dawn, Gympie, QLD, Australia.

1 You want more on the covertape? You've got it. Check out the chunk of plastic on this month's cover. Will that do?

2 Issue 68 was nearly three years ago, so you have to take something called inflation – you may have heard of it? – into account. Plus the fact that the CPC market has changed and it is much more difficult to find suitable

Speech therapy

I am writing to ask you if we can have some Public Domian megademos on the AA covertape very soon?

1 I always buy *Amstrad Action* because of the covertape and the game reviews and I'd like to say a few things.

2 When I had a 128K Speccy Plus 2, I had something called *NMI3* (*No More Intelligence 3*). Is it possible to do something like this on the CPC464?

3 I would like to get hold of a speech program that enables me to type in words and to have the program repeat them including voice alterations.

4 If you have not reviewed the game *Dalek Attack* is it possible to do this? Where could I get it from?

5 Is it possible to put a sampler demo on the covertape for a CPC464 soon? Something that does things like music recording or which would record my voice on some music and play them both back.
Stuart Henderson, Birmingham.

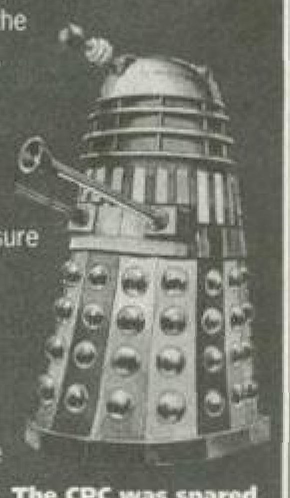
1 The chances of getting any PD megademos on the covertape are very slim because, basically, they take up so much room on the tape and they don't exactly do very much. One viewing and that's yer lot. Simon suggests that if you want non-interactive sound and pictures you should watch television instead.

2 Yes. Why?

3 Superior Software produced a program called *Speech* which did what you wanted but unfortunately, in a severe case of shortsightedness, they stopped doing stuff for the CPC some time ago. So your best bet is to advertise for a second-hand copy in our Reader Ads section. Or if anyone out there has an unwanted copy, send it to us and we'll pass it on.

4 *Dalek Attack* was never released on the CPC. Anyway, if you're familiar with the Speccy version stick with that. It was about the best one on any format. It was completely dire on the C64 and the Amiga.

5 Possible, but not probable. It would take up the whole side of a tape and we're not sure there are enough people out there interested in such a program to make that worthwhile. But feel free to write in and prove me wrong. **Dave**


The CPC was spared a Dalek invasion.

software to put on the tape now. Under the circumstances, I reckon our tapes are an excellent bonus to go with the magazine.
3 You try sending a copy of *AA* with a covertape to Britain in a decent package that won't get mauled by our respective postal services and see how much it costs.
4 If we wanted to put two tapes on the cover we would have to put up the price of the magazine, which we're not convinced is what most of you want. And as for the cover idea – no. Frankly, it wasn't very good, as even the original *AA* team would agree. **Dave**

It's all in the feet

I'd just ike to add a useful tip to all the *R-Type*-Bydo-Bashing-Bombing-Laser-Killing fans out there. Sit yourself comfy in a chair and have your CPC464 computer on the floor by your feet (that is if all Bydo Bashers are using the module MP-1) so when you pick up the force (and make sure you get it on the front) you can use your big toe to release it by pressing the CTRL key.


Avoid de-feet in R-Type.

It will drift back to your ship but stops in front of you about 1.5-inches away. If the CTRL key is pressed again it will come back to you and fasten itself to the front of your ship again.
Ghosty, Lancashire.

There must be easier ways. **Dave**

And I'm serious...

Many thanks for publishing my letter in *AA97*, but I thought I'd reply to set the record straight. I was not taking the mick. I was serious about the covertape containing *Mastercalc* and *Biff* (*AA95 – Dave*).

***Mastercalc* is one of the best and easiest to use spreadsheets for the CPC (and it was free). Why else would you spend time and effort over two issues of *AA* with a tutorial so that readers would be able to understand and make the best use of it?**

As for *Biff*, yes it's a poor Speccy conversion as far as graphics and sound FX go, but (it's a big but) the gameplay is (and that's where it counts) nothing short of magnificent. After all, and I quote your good self and Simon, "You have to be either mad or stinking rich to spend £45 on a game," and I refer to the so-called 'state of the art' 16-bit computers or 32-bit consoles. Yes, and I'll say it again: *Biff* is – SUPER HUMOUR.

Cheers again, and I MEAN it. And if I dare suggest it, how about selotaping a bottle of bubbly instead of a cassette on to *AA100*?
Ray Hawkins, Bognor Regis.

Ray... hmm... Ray...? You're not the famous Ray afflicted with a sarcastic tone of voice from *The Mary Whitehouse Experience* by any chance? No? Okay we believe you. No honestly we do. I mean thanks, really thanks for you really kind comments. We cherish them sooooo much. Oh no! He doesn't believe us. What a personal disaster. **Dave**

Traitors

How come you are devoting a full page to advertising Amigas? Every gullible reader who takes notice and buys an Amiga, thereby getting rid of Arnold, is putting a nail in your coffin – or are you considering switching allegiance?
Fred, Manchester.

We don't have gullible readers. They'd never sell off their CPCs (but don't let our advertisers get to hear about that). **Dave**

Training schedule

I take off my hat to JRN Jack for his excellent *Gamer's Trainer* in issue 97. I have a CPC464 and hope that your staff will not be too busy to reply to anyone who cannot cope with the 6128 commands used. The changes are easy:

I CLEAR INPUT is used in lines 1810, 2220 and 2520. Substitute WHILE INKEY$<>"": WEND.

I INK is included included in the MOVE command line 3210, so omit it to make the line read: 3210 READ a:MOVE 0,a:DRAW 640,a,1 (though the ink is not needed as the program is in MODE 2).

Please remember that the 646 users are customers because, without us, there would be no magazine, even though the 6128s may be more numerous.

As I have said before, I do not play games but do most Type-Ins, even if I don't keep them. I am 83 with wartime 'not too good' hands so this program can be of help, well worth the time to type.

Something seems to have happened with the line numbers for Venture Forth. Your covertape and article in issue 94 gives details but the the line numbers have been altered judging by the article in issue 95. Among other things, 'display room descriptions' has moved from 440/500 to 760/820.

I also think that some of the room descriptions are immature. These two factors do not encourage me to keep my mind on this tutorial. I hope you will correct this in due course.
DS Anthes, Dorset.

Over to Simon for this reply:
"First off then, the listings. We're really sorry about the incompatibility on that one, and you can be sure it won't happen again. Thanks for the alterations, by the way.

"As for Venture Forth you'll notice the line numbers changing a lot more in future – the point of the program is that we keep adding to it over the months. We don't expect you to re-type it every month, though, as a bit of handy work with the RENUM command should see you through the worst of it. Before you do any of that, though, I suggest you take a look at this month's episode, as we've printed the listing so far." **Simon**

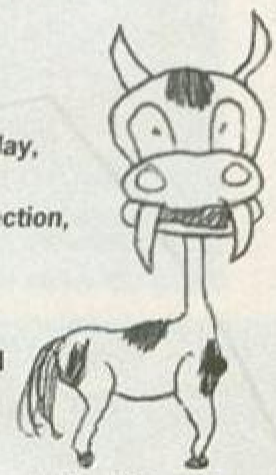
Lightguns, poems and odd doodles

Hello, I am a regular reader of *Amstrad Action and I'd just like* to say thanks and ask a few questions.

Thanks.

1 **A while ago someone wrote in who had a 464 and wanted a light gun. You suggested the Trojan one you reviewed once. Does this mean that the gun (advertised with Plus Machines and the GX4000) works on normal CPCs?**
2 **I'd like to acknowledge some people I don't know at all:**
a) Joe Hartley – a truly funky fellow if ever I saw one.
b) Rahul Gidha – for perseverance.
c) And my deepest sentiments to Loopy Lou. She's gone.
3 **Poor old Tim, eh? I liked him.**
4 **Egg.**
5 **A poem? Or not...**

An ode to AA,
We all cry out, YAY!
But only if Simon will play,
For us one day,
He could play with delection,
A varied selection,
And stick it on AA's
Classic Collection.


This odd doodle came with Bob's letter – we're not entirely sure why.

Anyway, keep up the good work, Dave my man, and ask Simon if he has had any good goose slaughtering sessions recently as it has been a bit dead up at my end.
Bob Ivor Nisket, Alresford.

1 'Fraid the light gun is a no go on the CPC (and it's not really much of a loss).
2 I'm sure they'll appreciate it.
3 You knew him?
4 Gegs (scrambled eggs).
5 Just because delectation doesn't rhyme with selection doesn't mean you can go around truncated words. **Dave**

Violent reaction

What really gets your goat? Is there something about the CPC world that really gets up your nose. Have you been screaming about it for ages, but only succeeded in annoying the neighbours? Then scream in the right place. That place is here. Violent Reaction is our new Soap Box feature, where you can have a decent rant. Just remember, don't make it personal (there are such things libel laws), don't make it about us (as if it could be) and don't use a pseudonym. Send your rants to: Violent Reaction, *Amstrad Action*, 30 Monmouth Street, Bath, Avon, BA1 2BW.

Cheat Mode

Braving the snow-capped mountains of Matlock to the subtle mad drivers and high-rise buildings of Bath, Lee Rouane's postie delivers another wad of excellent advice to those pulling their hair out over that seemingly uncrossable bridge, or unbeatable ninja, or invincible warrior, or inedible kebab, or whatever...



Alert, alert! Aliens have eaten the walls.

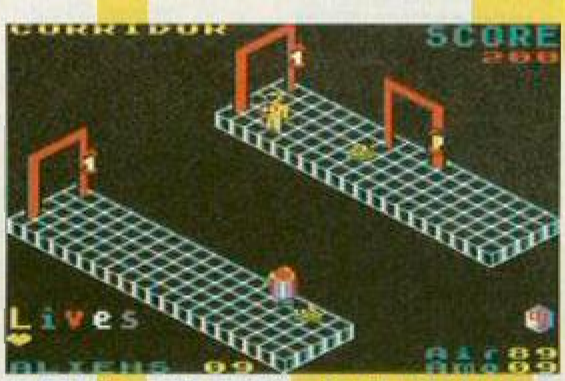
Neil Android



One cheat guaranteed to be of considerable interest to *AA* readers is for the covertape game *Neil Android* from issue 96. To help you in your isometric quest, infinite air, ammo and lives are provided in this little offering from the alpine air of Matlock.

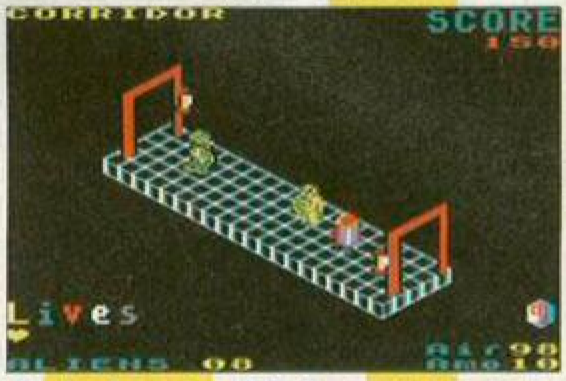


Come out, come out, wherever you are...



Is this the right platform for the Circle Line?

```
IAGH  100·DATA·21,00,06,11,00,9A,3E,F2,CD,A1,BC
IAEH  110·DATA·C3,30,BF,00,11,00,06,21,FF,AB,0E
IAEM  120·DATA·07,CD,CE,BC,21,42,BF,CD,20,BF,11
IAEJ  130·DATA·00,06,06,07,D5,CD,77,BC,E1,CD,83
IAKM  140·DATA·BC,CD,7A,BC,3E,3D,32,67,55,3E,3D
IANG  150·DATA·32,5C,3C,3E,3D,32,1A,37,C3,00,84
IAGG  160·DATA·6B,69,70,70,65,72,73,DF,EF,LCR
EAIF  170·chk=0:x=&BF00
JAPE  180·READ·a$:IF·a$="LCR"·THEN·210·ELSE·190
GAED  190·a=VAL("&"+a$):POKE·x,a
HAGN  200·x=x+1:chk=chk+a:GOTO·180
HAAI  210·IF·chk<>&1EA2·THEN·GOTO·430
JAPH  220·CLS:MODE·1:WINDOW·#2,1,39,1,5:INK·1,
      24
IALA  230·WINDOW·#1,1,39,6,24:CLS·#1:CLS·#2
IACJ  240·BORDER·0:INK·0,0:INK·2,18:INK·3,17
GACG  250·PRINT·#2,STRING$(38,208)
```



Oh, the ignominy of it all – snotted to death.

Five cheat listings for the price of one...

Give a big hand to the incredible Andy Price. What would Cheat Mode do without this man's continuous quest to defeat every protection system know to man. This time he provides us with a mouth-watering five-cheats listing. First, type in the main listing and save it. Then pick the cheat that you want and type that out. Then either merge the two or type the cheat directly after the main listing.

```
MALL  1·'·Speedlock·Disc·Decryption·System
HAIC  2·'······***·DOLPHIN·System·***
AAKH  3·'
EAFF  4·'·by·ANDY·PRICE
LAOI  5·'·Ocean·disk·loaders·(8k·sectors)
GAGI  6·'·Try·again·Ocean!!!!
AAOH  7·'
HAEA  10·DATA·21,0E,80,11,09,A2,01,00,16C
HAEG  20·DATA·02,ED,B0,C3,80,BE,1E,06,3C4
HAFF  30·DATA·18,08,F3,1E,65,01,7E,FA,30F
HANI  40·DATA·ED,59,06,F5,ED,78,1F,38,3FD
HAHI  50·DATA·FB,ED,78,1F,30,FB,1D,20,3E7
HAEH  60·DATA·F1,F3,C9,0E,C8,21,A0,A3,4E7
HABF  70·DATA·16,00,C3,8E,A2,4F,DD,21,356
HAFG  80·DATA·A0,A3,DD,7E,00,B9,28,0A,389
HALG  90·DATA·DD,23,DD,23,DD,23,DD,23,400
HAFI  100·DATA·18,F0,DD,56,01,DD,5E,02,379
HAHG  110·DATA·DD,46,03,3E,19,93,B8,38,300
HAKH  120·DATA·07,7B,80,3D,4F,C3,74,A2,367
HAOL  130·DATA·0E,18,C5,F5,E5,D5,CD,74,4DB
HAKI  140·DATA·A2,D1,E1,F1,C1,5F,78,93,570
HABG  150·DATA·47,7C,83,67,1E,01,14,18,1F8
HACL  160·DATA·DA,3E,4C,32,7E,A3,3E,06,2FB
HALH  170·DATA·32,83,A3,79,1D,93,32,1C,2CF
HAJH  180·DATA·A3,7B,32,07,A3,1E,C1,4B,324
HAAI  190·DATA·C3,8F,A2,59,7A,32,77,A3,413
HAGG  200·DATA·32,80,A3,22,BD,A2,7B,32,383
HAHF  210·DATA·82,A3,79,32,84,A3,11,7A,382
HACK  220·DATA·A3,CD,D7,A2,3A,97,A3,B7,514
HAHI  230·DATA·20,F4,11,74,A3,CD,C1,A2,46C
HAGI  240·DATA·11,7A,A3,CD,D7,A2,11,7D,402
HAPJ  250·DATA·A3,21,91,AC,18,1E,CD,D2,3D6
HAOH  260·DATA·A2,11,78,A3,CD,D7,A2,21,435
HAIJ  270·DATA·97,A3,CB,6E,28,F3,C9,01,458
HAHF  280·DATA·5F,A3,18,0B,01,47,A3,21,231
HACH  290·DATA·97,A3,18,03,01,10,A3,ED,2F6
HAEF  300·DATA·43,09,A3,1A,47,C5,13,1A,242
HAGK  310·DATA·01,7E,FB,F5,ED,78,87,30,48B
HACP  320·DATA·FB,FA,EF,A2,F1,0C,ED,79,5E9
HAFG  330·DATA·06,08,10,FE,C1,10,E6,01,2D4
HADH  340·DATA·7E,FB,11,00,00,C3,47,AC,340
HANL  350·DATA·0C,ED,78,0D,1B,ED,78,F2,3F0
HAMG  360·DATA·10,A3,7A,B3,C2,0B,A3,11,361
HABG  370·DATA·00,00,0C,ED,78,77,0D,23,218
HAGL  380·DATA·1B,7A,B3,CA,3A,A3,ED,78,454
HAGI  390·DATA·F2,29,A3,E6,20,C2,1D,A3,446
HACK  400·DATA·C3,44,A3,0C,ED,78,0D,ED,415
HAGH  410·DATA·78,F2,3A,A3,E6,20,C2,36,445
HAJJ  420·DATA·A3,21,97,A3,ED,78,FE,C0,521
HANJ  430·DATA·38,FA,0C,ED,78,77,0D,23,34A
HAFL  440·DATA·3E,05,3D,20,FD,ED,78,E6,3E8
HAAK  450·DATA·10,20,E9,C9,ED,78,F2,5F,498
HAJM  460·DATA·A3,C9,D9,01,7E,FA,ED,49,4F4
HALL  470·DATA·01,8D,7F,ED,49,AF,08,D9,3D3
HAPC  480·DATA·E9,03,0F,00,00,01,08,02,106
HAFE  490·DATA·4A,00,09,4C,00,00,00,C8,167
HADH  500·DATA·02,C8,2A,FF,00,07,0C,0F,215
HALB  510·DATA·00,03,04,06,01,02,0E,00,01E
HAAC  520·DATA·00,16,15,99,48,00,00,00,10C
HAKB  530·DATA·00,C7,02,00,00,00,00,00,0C9
GADO  540·DATA·00,00,00,00,00,00,00,00,000
OACC  550·n=·8:a=&8000:l=·10:WHILE·l<·550:GOSU
      B·560:WEND:GOTO·600
NACG  560·cs=0:FOR·x=1·TO·n:READ·v$:v=VAL("&"+
      v$):POKE·a,v
LALH  570·cs=cs+v:a=a+1:NEXT:READ·c$:c=VAL("&"
      +c$)
OALK  580·IF·c<>cs·THEN·PRINT"Data·error·in·li
      ne·",l:END
EAJH  590·l=l+10:RETURN
IAPG  600·MODE·1:INK·0,13:INK·1,0:BORDER·15
KAAL  610·PRINT"Insert·game·disc,·then";
KAMI  620·PRINT"·press·any·key..":CALL·&BB18
AAAO  630·'
GALO  640·'·Cheats·goes·here
```

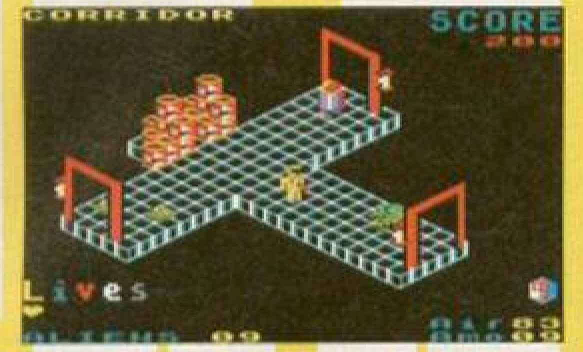
Flimbo's Quest (Infinite lives)

Follow all the instructions at the start of this section before typing in the following POKE.

```
GAHC  650·'·Flimbo's·Quest
EANL  660·'·by·ANDY·PRICE
```



He looks a right young lout if you ask me.



The odds were stacked against him. The cannisters were stacked against the wall.

```
LABE  260·PRINT·#2,TAB(10)"Neil·Android·Cheat"·
GANF  270·PRINT·#2,STRING$(38,210)
EAGP  280·PRINT·#1:PRINT·#1
KAOP  290·INPUT·#1,"Infinite·Lives·(Y/N)·)·",a$
JAFK  300·GOSUB·440:IF·a$="Y"·THEN·POKE·&BF31,
&0·
KAOP  310·INPUT·#1,"Infinite·Ammo··(Y/N)·)·",a
      $···
JAMM  320·GOSUB·440:IF·a$="Y"·THEN·POKE·&BF36,
      &0··
KACL  330·INPUT·#1,"Infinite·Air···(Y/N)·)·",a
      $···
JAKJ  340·GOSUB·440:IF·a$="Y"·THEN·POKE·&BF3B,
      &0
MABI  350·CLS·#1:PRINT·#1,"Load·From·Tape/Disc
      ·(T/D)"
EAHJ  360·WHILE·INKEY$=""·
GAAB  370·IF·INKEY(51)=0·THEN·400
HAON  380·IF·INKEY(61)=0·THEN·CALL·&BF0F
EAGB  390·WEND:GOTO·360
ABHI  400·CLS#1:PRINT#1,TAB(3)"Insert·Tape·30·
      Rewound·To·Start"
OAAA  410·PRINT#1:PRINT#1,TAB(7)"And·Then·Pres
      s·Any·Key"
FAJI  420·CALL·&BB18:CALL·&BF00
KAMN  430·PRINT·"Data·Error·Old·Bean·...":END
GAKB  440·a$=UPPER$(a$):RETURN
```

Multiface Pokes

5567,00	Infinite Lives
3C5C,00	Infinite Ammo
371A,00	Infinite Air

Space Mania

Alex Pim from Beaconsfield suggests that for infinite lives and invulnerability you should hold down CONTROL and C when the game begins. If it's been done right a little 'C' will appear in the bottom right-hand corner to tell you that the Cheat Mode is active.

Short Circuit 2



I mean, come on! Who in his right mind would build a robot that looked this stupid?

Paul Marsh of Colchester suggests that by pressing the keys O, C, E, A, N when you're playing the first level of Ocean's *Short Circuit 2*, (if it's a film licence it must be Ocean, right?) you will miraculously be transported to Level Two.

That should be some help to anyone's who's hopelessly stuck on the game, mentioning no names, A Wallace of Edinburgh.

Are you befuddled by listings?



Don't panic! There's a full explanation of how to type in listings and what the codes at the beginning of each line mean in the Type-Ins section which starts on page 26.

Rik The Roadie



Here is another sure to be popular cheat for *AA97*'s game *Rik The Roadie*. Give your 'pink doormobile' (well it hardly credits the accolade 'coach') infinite time and no time loss in the crash scenes with this nifty POKE from Matlock's equivalent of the dreaded '300 kebabs a week' monster. Also, since the tape had no tape-to-disk transfer routine there's one included in the POKE for you. Now then, who said that *AA* wasn't reader-orientated?

```
JAPA  100·'Rik·The·Roadie·(AA31)·Cheat
JAPP  110·'LRouane·For·Cheat·Mode·4/10/93
```

Getting into the right mode

Stuck on a game? Or perhaps you've found a cheat or hint that you reckon other people should know about? Either way, if you want to get into the 'Cheat Mode' the address you need is: Cheat Mode, *Amstrad Action*, 30 Monmouth Street, Bath, Avon BA1 2BW.

```
KAHI  665·'·Merge·with·Dolphin·systen
AAKO  667·'
GAHE  670·DATA·CD,0D,A2,CD,26,A2,3E
GAAA  680·DATA·01,21,E0,28,CD,30,A2
GAFB  690·DATA·CD,09,A2,CD,20,50,21
FAHP  700·DATA·00,52,3E,02,CD,30,A2
GALA  710·DATA·AF,32,0F,77,21,D0,73
DAAK  720·DATA·C3,65,A3
FAKH  730·FOR·a=&BE80·TO·&BEA5
FAHO  740·READ·x$:x=VAL("&"+x$)
GANO  750·POKE·a,x:NEXT:CALL·&8000
CAHO  760·CALL·&8000
```

Multiface POKE

770F,00	Infinite lives

Puzznic (Infinite time)

Follow the instructions at the beginning of this section before typing in the following POKE.

```
FAAM  650·'·Puzznic·disk
EANL  660·'·by·ANDY·PRICE
KADG  670·'·Merge·with·Dolphin·Systen
AAFO  680·'
FAGM  690·DATA·cd,0d,a2,cd,26
EAAP  700·DATA·a2,3e,01,21,00
FAJL  710·DATA·c0,cd,30,a2,cd
EAMP  720·DATA·09,a2,3e,02,21
FAFC  730·DATA·40,00,cd,30,a2
FAAE  740·DATA·af,32,9c,59,32
FAKH  750·DATA·9d,59,3e,ff,32
EAGP  760·DATA·c0,3b,21,40,00
DAFO  770·DATA·c3,65,a3
FACK  780·FOR·x=&BE80·TO·&BEAA
FAHK  790·READ·a$:a=VAL("&"+a$)
GAKH  800·POKE·x,a:y=y+a:NEXT
FABG  810·IF·y<>&111C·THEN·830
EADJ  820·MODE·0:CALL·&8000
```



Play Puzznic at your leisure with Cheat Mode's patented infinite time POKE.

```
HACL  830·PRINT"Error·in·cheat"
GAKJ  840·PRINT"y=",y:CLEAR:END
```

Multiface POKE

599C,00	Stops clock
599D,00	Do both POKEs
3BC0,00	Lots of retries

Monty Python (Infinite lives)

Follow the instructions at the beginning of this section before typing in the following POKE.

```
LAHG  650·'·Monty·Python's·Flying·Circus
EANL  660·'·by·ANDY·PRICE
KADG  670·'·Merge·with·Dolphin·Systen
AAFO  680·'
FAFK  690·DATA·CD,0D,A2,CD,26,A2
FAJF  700·DATA·3E,02,21,00,80,CD
FAPH  710·DATA·30,A2,CD,09,A2,3E
FABE  720·DATA·01,21,00,40,CD,30
FAJF  730·DATA·A2,3E,03,21,00,3E
FAII  740·DATA·CD,30,A2,D9,01,7E
FAMI  750·DATA·FA,ED,49,F3,31,00
FAIF  760·DATA·C0,CD,00,80,21,00
FAOC  770·DATA·40,11,00,C0,01,00
FAIJ  780·DATA·40,ED,B0,21,C7,BE
FACC  790·DATA·11,40,00,01,32,00
FAGG  800·DATA·ED,B0,C3,40,00,21
FABF  810·DATA·00,3E,11,00,BE,01
FAAH  820·DATA·80,01,ED,B0,01,8C
FAAL  830·DATA·7F,ED,49,AF,08,D9
FANG  840·DATA·21,5D,00,22,1C,BE
FAHI  850·DATA·21,00,BE,E9,AF,32
FALI  860·DATA·88,A3,C3,AD,7A,00
FAGK  870·FOR·x=&BE80·TO·&BEEA
FAHK  880·READ·a$:a=VAL("&"+a$)
GADI  890·POKE·x,a:y=y+a:NEXT
FANF  900·IF·y()&2871·THEN·920
CAEO  910·CALL·&8000
HACL  920·PRINT"Error·in·cheat"
```

Multiface POKEs

A388,00	Infinite lives
8AA0,00	Fewer enemies



Have you got your fish licence for this game? Nudge, nudge, wink wink, know what I mean?

The Manic multipoke mania zone

Thwarting every effort to forcibly remove them from this section of the mag, Archie Fulton, Tony Parker, Donna Packer and Alex Cochrane still battle it out with the Z80 chip to bring you this host of multiface POKEs. If you want to join the fray write in with any POKEs you've discovered to Cheat Mode, *Amstrad Action*, Future Publishing, 30 Monmouth Street, Bath, Avon BA1 2BW. It could change your life (but probably not).

Game	Format	Poke, Address	Effect
Moon Walker (TP)	Tape	T7739,A7	Infinite lives
		777A,A7	Stops timer
Builderland (DP)	Tape	43AA,A7	Infinite lives
Neil Android (TP)	Tape	5567,00	Infinite lives
Potsworth & Co (DP)	Tape	5117,A7	Infinite energy
Edd The Duck (TP)	Tape	1039,A7	Invulnerability
Skweek (AF)	Tape	72B2,00	Infinite life (2 Players)
		72A0,C9	Invulnerability
		8813,00	No enemies
R-Type (AF)	Disk	91A1,C9	Invulnerability
		91A6,00	Infinite lives
		9234,A7	Infinite credits
		9AA9,00	Extra firepower
Dizzy Dice (AC)	Tape/disk	1515,09	999 credits
		1516,09	Do all three
		1517,09	POKEs for 999 credits
Supercars 128k (AC)	Disk	06E4,99	Lots of money
		06E5,99	Do both POKEs
Rasputin (AF)	Disk	0EOC,C9	Infinite life force

```
AAKN  120·'
LAKB  130·DATA·CD,18,BB,21,00,01,11,87,A6,3E,F
      2,CD,A1,BC,C3
KABO  140·DATA·BE,00,00,CD,18,BB,11,00,01,21,8
      7,A6,0E,07,CD
KAIO  150·DATA·CE,BC,21,C9,00,CD,76,00,11,00,0
      1,06,07,D5,CD
LAOI  160·DATA·77,BC,E1,CD,83,BC,CD,7A,BC,C3,B
      E,00,CD,18,BB
KAKL  170·DATA·21,00,01,11,87,A6,3E,F2,CD,A1,B
      C,11,00,01,21
KACP  180·DATA·87,A6,0E,07,CD,CE,BC,06,07,21,C
      9,00,11,00,C0
KACN  190·DATA·CD,8C,BC,21,00,01,11,87,A6,01,0
      0,01,3E,02,CD
LABB  200·DATA·98,BC,CD,8F,BC,3E,00,32,BA,07,3
      2,B2,07,C3,00
KAPG  210·DATA·01,72,69,6B,2E,62,69,6E,00,00,0
      0,00,00,00,00
CAPM  220·DATA·LCR
DACN  230·chk=0:x=&50
```



That pink doormobile is just sooo rock'n'roll. I bet it's got leopardskin seat covers as well.

```
JAPE  240·READ·a$:IF·a$="LCR"·THEN·270·ELSE·25
      0
GABD  250·a=VAL("&"+a$):POKE·x,a
HAJN  260·x=x+1:chk=chk+a:GOTO·240
HAOG  270·IF·chk()&3244·THEN·GOTO·470
HAGI  280·CLS:MODE·1:WINDOW·#2,1,39,1,5
IABB  290·WINDOW·#1,1,39,6,24:CLS·#1:CLS·#2
GALI  300·BORDER·0:INK·0,0:INK·1,18
GAPF  310·PRINT·#2,STRING$(38,208)
PAOA  320·PRINT·#2,TAB(4)"Rik·The·Roadie·Cheat
      ·&·Transfer"
HAIO  330·PEN·1:PRINT·#2,STRING$(38,210)·
EADL  340·PRINT#1:PRINT#1
LANA  350·PRINT·#1,"1.·Transfer·Game·To·Disc"
KAPD  360·PRINT·#1,"2.·Tape·Cheat·Version"
NAKM  370·PRINT·#1,"3.·Disc·Cheat·(Once·Transf
      erred)"
KADM  380·a=0:WHILE·a=0:a$=INKEY$:a=VAL(a$):W
      END
FAAH  390·ON·a·GOTO·410,430,450
CAHK  400·GOTO·280
ABCP  410·CLS#1:PRINT#1,TAB(2)"Insert·Tape·And
      ·Disc·With·40K·Free"
MAKO  420·PRINT#1,TAB(10)"Then·Press·Any·Key":
      CALL·&89
ABKA  430·CLS#1:PRINT#1,TAB(6)"Insert·Tape·Rew
      ound·To·Start"
MABO  440·PRINT#1,TAB(11)"Then·Press·Any·Key":
      CALL·&50
PAPC  450·CLS#1:PRINT#1,TAB(6)"Insert·Disc·Wit
      h·File·RIK·On"
MAGO  460·PRINT#1,TAB(11)"Then·Press·Any·Key":
      CALL·&62
MAMK  470·CLS#1:PRINT·"Data·Error·Old·Bean·...
      ..":END
```

Multiface POKEs

07BA,00	Infinite time in crash scenes
07B2,00	Infinite time

Operation Thunderbolt

(Infinite credits)

Follow the instructions at the beginning of this section before typing in the following POKE.



They were ready for anything. Apart from an invasion of mutant greek yoghurts, perhaps.

```
LAJC  650·'·Operation·Thunderbolt·disk
EANL  660·'·by·ANDY·PRICE
KADG  670·'·Merge·with·Dolphin·System
AAFO  680·'
FAGM  690·DATA·cd,0d,a2,cd,26
EABP  700·DATA·a2,3e,02,21,00
FAJL  710·DATA·c0,cd,30,a2,cd
EANP  720·DATA·09,a2,3e,03,21
FACC  730·DATA·00,01,cd,30,a2
FAEA  740·DATA·af,32,62,53,21
FABA  750·DATA·00,60,c3,65,a3
FABJ  760·FOR·x=&BE80·TO·&BEA2
FAFK  770·READ·a$:a=VAL("&"+a$)
GABI  780·POKE·x,a:y=y+a:NEXT
FAKE  790·IF·y()&D2D·THEN·810
EABJ  800·MODE·0:CALL·&8000
HAAL  810·PRINT"Error·in·cheat"
FALB  820·CLEAR:LIST·650-750
```

Multiface POKE

5362,00	Infinite Credits

Super Off-Road Racer

(Infinite boost)

Follow the instructions at the beginning of this section before typing in the following POKE. And get a load of this, he's added some game code that'll enable you to keep your finger on the boost button for automatic constant boost.

```
HANJ  650·'·Super·Off·Road·Disk
EANL  660·'·by·ANDY·PRICE
KADG  670·'·Merge·with·Dolphin·System
AAFO  680·'
GAFI  690·DATA·cd,0d,a2,cd,26,a2
FADO  700·DATA·3e,01,21,00,c0,cd
GAPB  710·DATA·30,a2,cd,09,a2,3e
FAII  720·DATA·02,21,00,19,cd,30
FAEL  730·DATA·a2,3e,03,21,00,c0
GAGF  740·DATA·cd,30,a2,af,32,8d
FAHH  750·DATA·67,32,65,e2,32,66
GAHA  760·DATA·e2,32,67,e2,3e,c9
FABJ  770·DATA·32,d6,71,21,00,c0
DAGO  780·DATA·c3,65,a3
FALJ  790·FOR·x=&BE80·TO·&BEB8
FAPJ  800·READ·a$:a=VAL("&"+a$)
GALH  810·POKE·x,a:y=y+a:NEXT
FAAG  820·IF·y()&1791·THEN·850
IACD  830·MODE·0:PRINT"Press·a·key"
FAPG  840·CALL·&BB18:CALL·&8000
HAEL  850·PRINT"Error·in·cheat"
```

Poking the multiface way

1 Make sure that you've got a Multiface plugged into the back of your CPC; it helps.
2 Load the game as normal.
3 Press the RED button on the Multiface.
4 Press 'T' for tool.
5 Press '*' to select the code.
6 Press 'H' for HEXADECIMAL input.
7 Press 'SPACE' for input.
8 Type in the ADDRESS (ie, 3A7C)
9 Type in the POKE (ie, A7)
10 Press 'RETURN'
11 If there's more than one poke go to 7.
12 Press 'ESC' back to the menu.
13 Press 'R' to return to the game.

ROMBO DISCOUNTS

ROMBO ROMBOARD
Now only £25.00

The most widely used of all Romboards. 8 sockets; on/off switch for each; high 8 or low 8 ROM slots selectable; facility for a ZIF socket or 16k RAMROM.

DISCOUNTS
20% - with the Dual-Mode Drive
10% - with ROM software valued at £20 or more.

EPROM PROGRAMMER
with ejector socket - £30
with ZIF socket - £35

Programs 8k and 16k, 12.5v and 21v eproms; full eprom, part eprom and single byte programming; ROM file editing. Supplied with easy to use menu driven Software, PD games ROM file, utilities to turn Basic and machine.

32k RAMROM - £14.95
32k of RAM in two 16k blocks. Each behaves like a ROM, surviving resets, when loaded with ROM software. Ideal for testing ROM programs without the need to blow/erase eproms.

ROMBO VIDEO DIGITISER
Now only £65.00

Captures video pictures from a video recorder, camera or TV with 'video out' to computer memory. Manipulate pictures, save to disc, use in programs, print out, etc.

ROMONOFF SWITCH - £7.95
Connects to the expansion port to turn all external ROMs OFF or ON as needed. Not suitable for a 464 with disc drive.

3½" DUAL-MODE DRIVE

Pound for pound the best value around

Now includes 22DISK - the No. 1 CPC/PC/CPC file transfer program.

Also includes:-

** MS800 on disc * MS800 on ROM*
** 10 blank discs * carriage*

Our superior drives do everything that all other 3.5" drives do - and more besides!

CHECK OUT THESE FEATURES:-
MODE 2: Full, unimpeded use with Rodos, Ramdos, Romdos and Romdos XL giving up to 800k per disc without the need to use the **SIDE SWITCH**. The statement elsewhere that "*other drives. . . will only allow you to access 400k at a time*" is a lie as many who have resorted to adding their own side switch to inferior drives can confirm. Full use of MS800, the no.1 high capacity formatter - 800k per disc at 400k per side.
MODE 1: works as a complete alternative to the FD1 B drive - 180k per side. Without the side switch, mode 1 is not possible.
OVERALL: Ultra quiet mechanism, the type used in most professional computers; super small; separate power supply; sleek metal case. You need to buy nothing else to use your drive immediately. MS800 is supplied on disc and ROM whether or not you have a Romboard - *see the ROMBO DISCOUNTS*

464 PLUS 1st drive - see this ad.
Old 464 1st drive - not suitable.

Please state your computer model when ordering.

£79.95 complete

MS800 is the number one high capacity formatter, allowing up to 800k storage per 3.5" disc. It is the ONLY one that doesn't need to be present for its discs to be used, the ONLY one that is compatible with all software including CPM, the ONLY one that uses no memory whatsoever, the ONLY one that can use its discs in drive A (ABBA switch users, please note), the ONLY one that works with the Plus machines. It is supplied with its own copying utility and a menu program that allows many tape to disc transferred games to run from drive B. Check these features against any alternative and you'll see why MS800 is simply the best.

MS800 disc or ROM	9.95
MS800 disc and ROM	14.95
ROM for disc owners (proof needed)	5.50

464 PLUS 1st DRIVE - under £120

BONZO SUPER MEDDLER
Exceptionally good tape to disc transfer utility, very large on-disc database of verified transfers. Produces stand-alone transfers.

BONZO BLITZ
Transfers all varieties of SPEEDLOCK tapes onto disc, producing stand-alone transfers. On-disc database of verified transfers. Includes 4 adventure games - *FREE!*

BONZO'S FLASHPACK
Over 60 additions to Basic, some very powerful. Flash Basic's commands can be used within your own Basic programs but it does not need to be present for the programs to run!

MAXIDOS
The most comprehensive and effective general disc utility available for the CPC. All features work with Amsdos, CPM, Ramdos and Romdos. Includes:- disc/file copy, disc optimise, CAT inc. erased files, restore erased files, disc editor and much much more.

BONZO'S BIG BATCH
Fast, flexible Database; superb pools predictor; screen and sprite designer.

SUPER MEDDLER	13.95
BLITZ	13.95
FLASHPACK	9.95
BIG BATCH	9.95
MAXIDOS	13.95
22 DISK PC/CPC/PC transfers	5.00

ROM SOFTWARE

PROTEXT	£30	UTOPIA	£25
PROSPELL	£25	MAXAM	£30
PROMERGE	£25	MAXAM 1.5	£25
PD GAMES ROM (2 games)			£3.50
6128 UPGRADE ROM Supplied with full fitting instructions			£24.95

3rd DRIVE SWITCH	12.95
ABBA SWITCH	12.95
SIDE SWITCH (kit)	3.00
SIDE SWITCH (plug-on)	5.95
ABBA & SIDE combined	14.95
3" Amsoft discs	10 for 20.00
3.5" discs......10 for £7.50;	30 for 20.00
3" individual disc cases	10 for 5.95
3.5" locking disc box (holds 40)	7.95
64k DkTronics RAM PACK	39.95

The ABBA switch swaps the A and B drives around; the 3rd DRIVE SWITCH allows a 2nd B drive to be connected; the SIDE SWITCH converts inferior drives to Dual-Mode capability. The 3" DISC CASES are of the book opening type.

* * SPECIAL * *
8128 circuit board - only £45
Fully populated, including the disc interface and 128k memory. Ideal for converting a 464 to an *actual* 6128.

RS-232 £39.95
with COMMS software

This is the device that connects to the CPC or Plus computer to allow it to connect to the telephone, via a modem, or to another computer. It has 2 channels and can be connected to 2 different peripherals, e.g. a serial printer and a modem. It has the same designer as the PACE RE-232 and uses the 'legal' addresses.

464/6128 PLUS
Low cost *INTERNAL* disc/memory upgrades

	D.I.Y. kit	Done by us
464 plus		
Extra 64k	15.00	25.00
Disc interface	30.00	40.00
6128 plus Tape port	18.00	30.00

Includes the REMOTE facility.
Does not include a tape recorder
*** Please write or phone for details * before sending your computer.**

AVATAR

28 BELMONT AVENUE BRADFORD BD12 0PA

0274 602180

MAJOR CREDIT CARDS ACCEPTED

multiface. THE FINAL CLEARANCE!

When the **MULTIFACE** was launched in 1986, it was an outright winner. No one has ever come up with such a powerful, useful add-on. Labeled *the ESSENTIAL CPC COMPANION*, this **MULTI**purpose inter**FACE** proved to be an absolute Godsend for the Amstrad CPC users. Remember the first disk drive on the CPC 464? Suddenly the loading took seconds rather than minutes from tapes. Except that there was not much to load - very little had originally been released on disks and there was no facility to transfer programs from tapes to disks.

THE SAVIOUR

This is one area where the **MULTIFACE** saved everything - literally. The black magic box could stop anything any time and **SAVE** it to disk or tape. When the 6128 came with a built-in drive, it was left again to the **MULTIFACE** to do all the transferring - and to perform other miracles... So, in case you just came from Mars, what does a **MULTIFACE** do? First, it sits at the back of your CPC, its magic button always ready. Press it, and the **MULTIFACE** takes control!

ACTION!

Once in action, it freezes everything and it displays its own menu. Being fully menu-driven and error-trapped, you'll probably never need the full manual that comes with the MULTIFACE. Most operations are also entirely **AUTOMATIC**, so to *SAVE* a game once you stopped it, you just *name* it, insert *disk/tape*, and press a key. You can then *return* and *continue* the program. If you get beaten later on, just reload from where you saved last and play just from there again! No need to go back to the start all the time. Or even better, the **Multiface** allows you to **POKE**

INFINITE LIVES

listed in this magazine and you'll *never* loose. The MULTIFACE comes with a built-in **TOOLKIT** that lets you inspect/alter/dump the CPC RAM. It also has its own 8K RAM and 8K ROM. Many top programs were written with the aid of the TOOLKIT and the extra 8K RAM. And do you like the **screen shots** in this magazine? They are all produced using the **MULTIFACE!**

When we announced earlier that we were to pull out of the 8-bit market, the surge of interest in the **MULTIFACE** was such, that we had to make many more. And not just the MULTIFACE - we also have the one and only disassembler,

THE INSIDER

that lets you ***see*** and ***alter*** what happens any time anywhere inside a ***RUNNING*** CPC program. It comes on a **disk** and loads inside a MULTIFACE. Press the magic button and the **INSIDER** will disassemble, find text/code, dump the CPC RAM to printer, etc. Get it at **HALF-PRICE** for **£7.95**!

LAST CHANCE!

As this goes to press, we still have enough stock of both the **MULTIFACE** and **INSIDER**. This, however, is our ***final clearance*** and once these are sold, we will NOT make any more. The **MULTIFACE** is terrific value, in fact more for the *customer* than for the *manufacturer*... We will only accept orders when we can supply the goods and we give a *full guarantee*. Plus we still offer up to **£10 OFF! mail orders!**

You MUST NOT use our products to copy, reproduce or infringe in any way whatsoever any copyright material without the permission of the copyright owner. We do neither condone nor authorise the use of our products for the reproduction of copyright material - to do so is ILLEGAL!

All prices are already discounted and apply to Mail Orders to 31.1.1994 only.

I order a **MULTIFACE 2** for **CPC 464/6128** ☐ ~~£47.95~~ **£39.95** or for **CPC+** ☐ ~~£49.95~~ **£39.95**
RODOS ☐ ~~£29.95~~ **£14.95** **BLANK DISKS** ☐ ~~£9.95~~ **£2.95** **INSIDER** ☐ ~~£14.95~~ **£7.95**
PLUS P&P: UK and Europe **£2** Overseas **£3**.
I enclose a **cheque/PO/cash** for £.............. or debit my **Access/Visa** No. ☐☐☐☐☐☐☐☐☐☐☐☐☐☐☐☐ Card Exp............
Name/address..

ROMANTIC ROBOT, 54 Deanscroft Ave, London NW9 8EN ☎ 24 hrs 081-200 8870 ☎ AA

The Examiner

He trudged across the vast plain. He was lost and utterly alone, with no water, no food and no bus pass. His only hope... his last hope... was that he was just a character in an adventure, and whoever was playing the darned thing had the good sense to read Debby Howard's pages in AA...

REVIEW Danger: Adventurer At Work

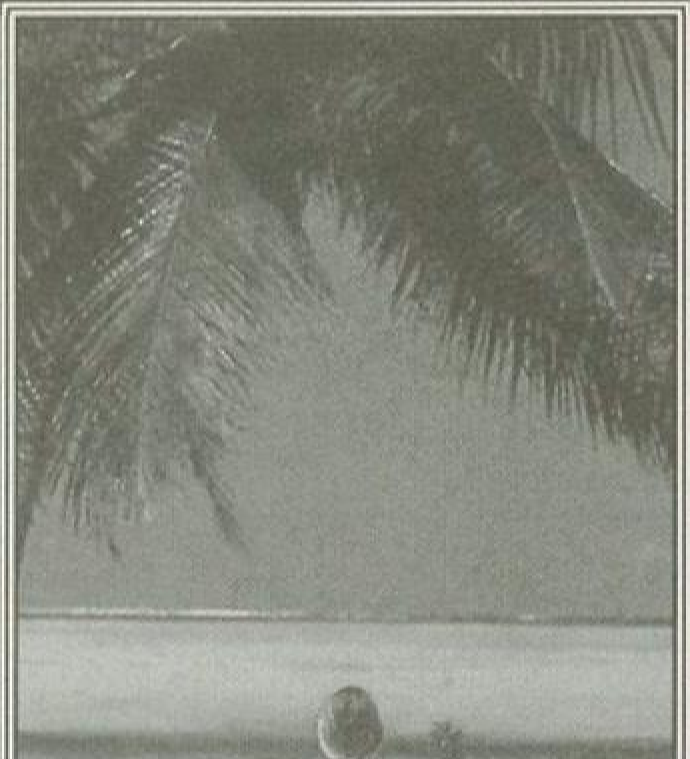
Tape: £2/disk £4. WoW Software, 78 Radipole Lane, Weymouth, Dorset DT4 9RS. Cheques/POs payable to: JG Pancott.

Hey, Brechtian alienisation or what? In this adventure you play the part of an adventurer, and you're desperately looking for a quiet place to hide so that you can play your adventures to your heart's content – now that's something I can really relate to. It was written by Simon Avery, using *The Quill* and is a text-only adventure. *Danger Adventurer At Work 2* has also been released and was reviewed in *AA89*.

Although this adventure has been out for some time, somehow it slipped the *AA* reviewing net, and since, in my opinion, it is one of Simon's best adventures, I feel that it's well worth correcting this oversight.

Personally, I think *Danger* is irresistible and quite challenging. The puzzles themselves are pitched at just the right level, not too easy an not too hard, making it an ideal choice for anyone looking for a game they can immerse themselves in for an hour or two.

There are loads of characters you'll bump into, and if you're perceptive you might notice that many of them bear certain similarities with personalities on the Amstrad scene, such as the witch hanging around looking thoroughly miserable who is obviously... (*we'll stop it there, thank you – AA's libel lawyer*). Unfortunately unless you are familiar with them the jokes will go straight your head.



Lots of the characters in Danger: Adventurer At Work are based on people in the CPC scene. I wonder who the woman on the beach is supposed to be?

Nevertheless there's plenty of the usual, less in-jokey humour associated with Simon's games, which I'm sure you will enjoy. If you're lucky enough to make it to the beach, be very nice to the young lady with the inner tube that you find there, as it is supposed to be ME! You will also come across certain parts of the body like a left leg, and you end up wondering who the hell wouldn't miss their one of legs?

It's not an adventure that will have you stuck for ages; most of the puzzles are quite logical, but there is a point of no return, and if you haven't got the right object with you I'm afraid it's back to the beginning, so make sure that you save frequently!

The price seems reasonable enough, making *Danger* an ideal adventure for anyone looking for a game that's not too heavy, but not a doddle, either.

85%

Lords & Ladies of Adventure



They're like the masons. Or the Worshippful Company of Coopers. You wouldn't recognise them in the street but these people belong to a an ancient brotherhood with traditions and rites that stretch back... oooh, at least eight years (since *Amstrad Action* started, spookily enough).

The Lords and Ladies of Adventure are people who have finished adventures and who are willing to share their knowledge and experiences with anyone stuck on those adventures. Theirs is a truly worthy cause.

So if you are stuck on one of the games listed below, these kind souls are willing to help you. Please remember, if there is an address to write to, enclose an SAE with your enquiry and DON'T ask for a full solution, otherwise you might be disappointed.

- Just about every CPC adventure ever written – Joan Pancott ☎ (0305) 784155 between 1pm and 10pm.
- *Adult 2, Can I Cheat Death? Dungeon, Firestone, Jason & The Argonauts, Spacy, Tizpan, Welladay* – Stuart Mainland, 2 Douglas Road, Coylton, Ayr, KA6 6JJ.
- *Avon, Forest At World's End, Hollywood Hyjinx, Kobyashi Naru, Mordon's Quest, Scapeghost* – Angela Allum, 22 Point Royal, Bracknell, RG12 7HH.
- *Knightmare, Kobyashi Naru, Rebel Planet, Who's Afraid Of The Balrog?* – Ross Younger, 3 Cammo Parkway, Edinburgh, EH4 8EP.
- *Five On A Treasure Island* – Phil Mitchell: ☎ 0684 274232 (evenings).
- If you've finished an adventure and you feel like giving someone else some help with it (and letting everyone know what a clever clogs you are) you can become a Lord or Lady of adventure simply by writing in to: Lords and Ladies, *Amstrad Action*, Future Publishing, 30 Monmouth Street, Bath, Avon BA1 2BW. It could change your life (probably).

Letters

Dear Debby,
I have played several adventures written by Simon Avery, and I have enjoyed them immensely. I was hoping to play every one he has released as I think that he is brilliant, but I'm not sure of all the adventures to his credit. Would it be possible to give a list of them all?
David Dumas, Nairn.

No sooner said than done David. Simon has used several aliases such as Michael Hunt, Justin Thyme and Grimwold which I have included into the list as well.

Games Written By Simon Avery Up To March 1993 using *The Quill*:
● **Public Domain:** *Roog*, Welladay, Doomlords I, Doomlords II, Doomlords III, Can I Cheat Death? Adult II, Boredom, Spacy, Dungeon, Firestone, Jason And The Argonauts, Tizpan Lord Of The Jungle, Labyrinth, Public Domain Library Blues and House Out Of Town.*
● **Commercial Adventures:** *Magician's Apprentice, Total Reality Delusion (TRD), Prison Blues, Danger Adventurer At Work I, Danger Adventurer At Work II, A Thief's Tale I, A Thief's Tale II, A Thief's Tale III, Gerbil Riot Of '67, A Day In The Life Of A Tupperware Salesman, A Day In The Life Of A Tupperware Salesman 2, Merlin I, Merlin II, Pre-History.* and *Grimwold's Big Adventure.*
*This game has also been released as an Adlan re-write. **Debby**

Dear Debby,
I've read a lot about *Quilled/GACed/PAWed* adventures in reviews recently, and as I'm new to adventuring I was wondering whether you can explain to me what they mean?
A Picksford, Surrey.

They are all databases on which adventures are created. GAC (*Graphic Adventure Creator*) has actually been on one of AA's covertapes; to get a better understanding of what I am talking about dig out tape 10 and have a look yourself. Basically what you do is type in the information that structures your adventures and the program will compile it for you and save out a playable adventure. It's more complicated than that but that's a brief description of what they do. **Debby**

Dear Debby,
Are you going to award honourary titles such as HPilg and HBalg like your predecessors have done?
Arnold Jones, Wales.

Sounds like a great idea, perhaps someone could come up with a suitable title that I can award people who have excelled themselves on the Amstrad adventure scene? **Debby**

Give us a clue

If you would like to help fellow adventurers out of a jam, please send in your tips and hints for any of the adventures you have played to The Examiner, *Amstrad Action*, Future Publishing, 30 Monmouth Street, Bath, Avon BA1 2BW. This month's tips come from: Malcolm Dowse (Co. Dublin), Jonathan Hoey (Co. Down) and Phill Ramsay (Manchester), all of whom are awarded honourary membership to the Give Us A Clue Club (which I've just made up).

Five On A Treasure Island

● **The light the fire:** Eat the cake (found in the pantry) and you will drop some crumbs. Take them to the Round Tower. Drop them again and the jackdaws will knock down some sticks. Drop them in the Whole Room. Unwrap the sandwiches, light the paper and light the sticks with the paper. (WARNING: Do not light the fire before you get a cold.)

● The Wrecked Ship is washed up at the Rocky Headland in the storm.

● Get Julian to chop the cupboard with the axe, in the Captain's Cabin.

● Take the box back to the mainland and drop it out of the Attic window.

● Whenever Uncle Quentin goes to sleep in his study, CREEP in and take the box out of the drawer and read the map.

● After reading the map, dig with the spade just west of the room and then TELL TIMMY DIG.

● Get the rope, tie it to the ring on the slab and pull the rope.

● To open the door to the gold, Julian has to chop it down.

● When Anne and Dick return to the surface, get them into the well as fast as possible. Get Dick to climb down the ladder and the rope and climb through the well wall.

● Go back and find Uncle Quentin (make sure you are not George). Give him the gold.

● Lead the policeman and Uncle Quentin to where he is and unlock the door.

● **RED HERRINGS:** The onion and the broken cup (You can use the candle found in the attic but it is not necessary).

● To befriend George bring everyone to the grocer's shop. Become Julian (or whoever has the pocket money) and buy ices. Give the ices to George. George is now friendly. Buy the ginger beer. Make your way to the fishermen's buildings. George will tag along now so there is no need to bring her separately. Become George and talk to Alf. Alf will bring Timmy to you. Get on board the boat and make everybody drop everything. Dick will probably take the food straight back anyway. Get the oars and row to Kirrin Island. You MUST be George at this point as only she can negotiate the rocks safely.

● When you get to Kirrin Island you must get everybody to take as much as they can. Leave the dropping of the oars to last as if you drop them first someone else will get them. Leave the pocket money behind too (you won't be needing it).

The Weirdstone

Water the plant in the library. Don't take the plant anywhere else to water it, or you'll lose the water and cannot complete the game.

Doomlords I

Give the rum to the spider.

Doomlords II

Plait the hair to make a rope.

Doomlords III

Give the toothbrush to the crocodile.

Gerbil Riot Of '67

Get and eat the garlic to avoid the vampire in the cellar.

Dances With Bunny Rabbits

Wear the dress and drop the hanky to get out of the concrete bootees.

Spectre Of Castle Coris

Buy and eat a lozenge to cure the rat's disease.

Where To Go!

Get a load of this – if you send a stamped self-addressed envelope to either of the following addresses, within a few days you will receive a catalogue of all the adventures, new and re-released, that they've got in stock. And then you'll be able to order the ones you want. What a truly amazing concept.
● **WoW Software, 78 Radipole Lane, Weymouth, Dorset, DT4 9RS.**
● **The Adventure Workshop, 36 Grasmere Road, Royton, Oldham, OL2 6SR.**

Power Up

From here on in it's reviews all the way as games and utilities get a thorough AA grilling.

Reviewing software for Amstrad Action is no task for ordinary human beings. And the mob that get the job are certainly not ordinary. They're barely human, come to that...

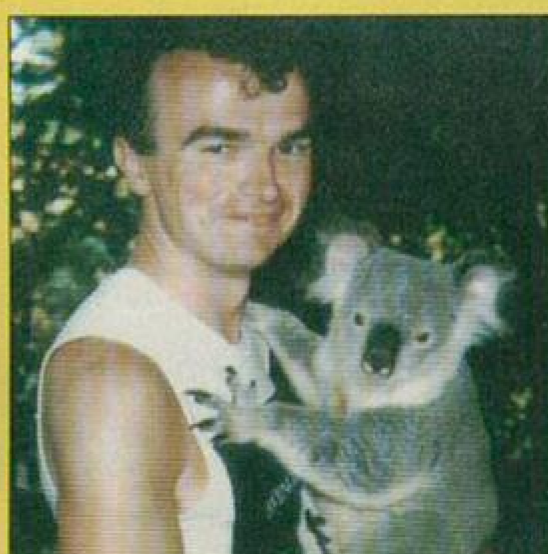


DAVE GOLDER, Producer/Director

Most embarrassing photo: St Paul's nursery school fancy dress part, 1972. "Or was it? How come absolutely no-one's smiling? I reckon, looking back, I might have been hoodwinked into some bizarre devil-worshipping ritual."
Most embarrassing fan club membership: Doctor Who (you might have guessed).
Most embarrassing record: The Best of Doris Day including The Deadwood Stage.
Most embarrassing revelation: Cycling into a canal after a few too many wine gums.
School nick name: Box
Dedicates this issue to: anyone who's ever been stuck in a traffic jam on the M25

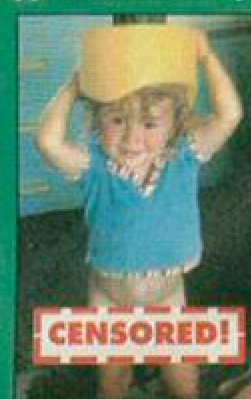
ANDY OUNSTED, Production Designer

Most embarrassing photo: Brisbane, Australia, summer 1988. (Andy's the one the right, by the way... er... we think.)
Most embarrassing fan club membership: Chelsea (some old punk band that nobody's ever heard of. They've been going years – Andy only joined recently and he's member Number 8).
Most embarrassing record: Smash Hits Country Style including Jolene.
Most embarrassing revelation: He's built a Dalek which he calls Cuddles.
School nick name: Dunlop
Dedicates this issue to: My Dad



SIMON FORRESTER, Best Boy

Most embarrassing photo: Mablethorpe, England, summer, 1975. "I was just 18 months old and I hope that potty wasn't full."
Most embarrassing fan club membership: The Hairy Happening Appreciation Society
Most embarrassing record: Pinky and Perky Sing The Blues
Most embarrassing revelation: The big wuss is scared of spiders.
School nick name: Squerf ("I'm not actually sure why.")
Dedicates this issue to: Cathy Bishop



Sarah Tanser, Mr Forrester's stunt double

Most embarrassing photo: That stupid one you printed last month, and you'd better not print it again...
Dedicates this issue to: the furtherance of human knowledge.

Separated at birth?



Jeremy Beadle — Biff

The teeth that clinched it this month. Honest guv. Do you think anyone famous looks like a game character? Or perhaps you know a friend who does. If so, then send your suggestions and/or photos along to us here at Separated At Birth, *Amstrad Action*, Future Publishing, 30 Monmouth Street, Bath, Avon BA1 2BW.

AA Trump Cards # 2

For you to cut out and collect. Now you've got two you can even play a game with them.

Dizzy

Codemasters



Cloying cuteness factor	7
Appearances	12
Hardness	Depends whether he's boiled
Street Cred	0
Quality of games	6
Resemblance to a deckchair	2
Overall AA totally biased rating	4

Go Cartin' 4: the carts that wouldn't die

Just when you thought it was safe to go back to using disks and cassettes... THE CARTS CAME BACK! Cart games that slipped the net the first time must be caught and reviewed. The Amstrad Action crew have volunteered for the task.



Between those gruelling racing sections you can have a wash and blow dry.

Fire and Forget 2

Available from The Software Cavern ☎ 0628 891101

Ever wanted to drive a car that thinks it's a plane (or maybe a plane that thinks it's a car)? Well, it's not very likely is it? The nearest you're likely to get is playing *Fire and Forget 2*, and frankly that's about as near as the England Football team are to appearing in a World Cup Final.

Thunder Master 2 is your craft for this mission, equipped with phasers and a missile launcher. Your task is to protect the Peace Conference from terrorists who are heading towards the city to kill the delegates. You are the government's solution. Time is limited so climb into Thunder and get to work.

Destroy everything that comes near you except for the fuel and ammunition power-ups. When you reach take-off speed, launch your car and take to the air. When you have killed the convoy of armoured vehicles you get to fight the big baddies. The final confrontation is with the vehicle carrying the tactical 'life thirsty' nuclear mega missile (also known as Trident). Kill this, and the conference is safe.





The added element of flight turns this into one-and-a-half games effectively – but keep an eye out for that fuel gauge!



Somehow the kill, kill, kill ethos seems to work for this game. In fact, this ethos is so all-pervading you don't even have to bother steering to stay on the road; the game does that for you. You just concentrate on aiming the Thunder Master 2 at the enemy and blasting away like their lives (being terminated) depended on it.

If you like driving games *Fire and Forget 2* is not for you because there really isn't that much driving in it. But let's not hold that against it. Me? I can drive a car in real life, but because driving sims are, let's face it, so far removed from the real thing, I don't really enjoy them that much. *Fire and Forget 2* extracts the driving element from the equation and what's left is really rather good. If you like shoot-'em-ups and want something a bit different to horizontally-scrolling alien blasting then this should be right up your street (at about 150mph). **Sarah**

75%



If only you could create explosions like this in the middle of Brookside...



The rest of the game involves driving along and killing lots of things very violently.



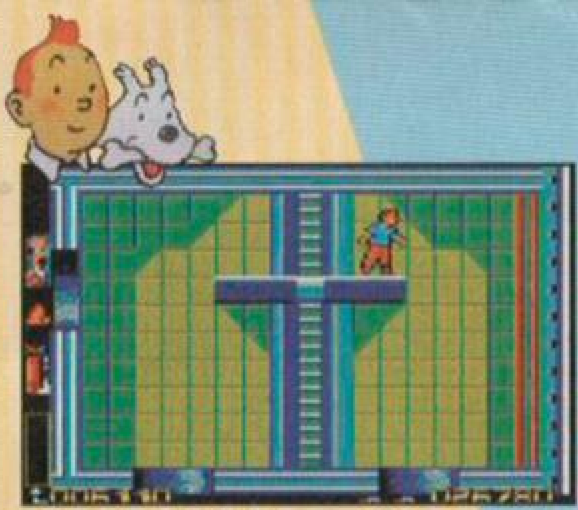
Tintin on the Moon

Available from The Software Cavern ☎ 0628 891101

Who's this impostor, then? The main sprite in this game is certainly not the Tintin we know and love. He's got brown hair. And he walks like he's got a hernia.



And so they blipped along in a little red rocket avoiding asteroids and such like.



Meanwhile, inside the ship, Tintin was having problems of his own with a few fires.

Accompanied by Captain Haddock and Professor Calculus, the Tintin impostor launches into space on the first ever rocket to the moon. The first level seems a bit pointless. You simply guide the rocket through the meteorite storm catching red and yellow spheres on the way. Catch eight red spheres and you go on to the next stage.

Section two sees Tintin inside the rocket, with fires raging and the evil Colonel Boris (*hang on, when did he come on to the scene? – Dave*) taking control of the vessel. The rest of the crew have been kidnapped, and bombs have been planted throughout the rocket (oh very logical).

All you have to do is put out the fires, free your companions, capture Boris and defuse the bombs before the whole thing blows sky high.



That's about it really. There is a final section in which

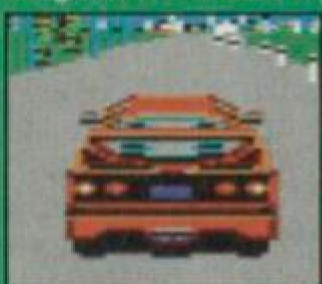


One swift kick of the tyres, and we can be back on the road in no time.

Crazy Cars 2

Available from The Software Cavern ☎ 0628 891101

Sorry, I just can't summon up any enthusiasm for this one. It's another driving game, as the name suggests. You get behind the wheel of your car to take part in an race across America against some corrupt policemen. You start up the engine and roar off down the road. You've barely got into top gear when you crash into the back bumper of a police car. You've been playing for less than a minute, and you're arrested. Game over.



That's you, in your fast and funky roadster.



Talk about police cars coming from out of nowhere – this one seemed to land right on top of me! Talk about being crowded out!

What happened? How can I get round this problem? Is there any point bothering? The answers to these questions and many more besides will be revealed by the end of this review.

The roads are pretty narrow, so you have to try and squeeze past the police car at a legal speed, and miss the lamp posts and telegraph poles that litter the landscape. It's ridiculously easy to write off your car.

Your car is a state-of-the-art Ferrari F40 which features a very helpful on-board computer that tells you when to turn off the road, but it doesn't know exactly where you are. Such intelligence. Unnatural really, isn't it? The car is also equipped with a radar so that you can tell where the police are, but the display is so small



Plotting

Available from The Software Cavern ☎ 0628 891101

"You've got *Plotting!*" The cry goes up around the building. The telephone never stops ringing and you can't get on to your CPC because everyone else is hogging it. The cart version of *Plotting* has been discovered still on sale and the AA office has come to a grinding halt.

Yes, *Plotting* is addictive. It's like *Pang* in that respect. Every night Simon and a (usually female) opponent spend an hour unwinding with a bout of two-player *Pang*. It's brilliant when... (*Cut. You're supposed to be reviewing* Plotting, *not wibbling about* Pang *– Dave*).



Sorry, I flipped out there for a minute. Now where was I? Ah yes, *Pang*. No, *Plotting*. *Plotting* is the single person's *Pang*. It's the game you play to unwind but there's no-one else around to play *Pang*. *Plotting* is a game for the interlekchewell type of person. To play it well, you have to kick start the grey matter.



You really should watch this – Blob Thang is an expert at this kind of thing.

I could tell you how to play it, but I don't know if that would actually help matters. Not that I'm saying you're thick or anything, but it's one of those abstract games that's pretty difficult to describe. The manual say it's as simple as grilling ice cubes – well that depends on whether you still want ice cubes or a grill full of water afterwards. Okay, I'll give it a go...

There are four colours of blocks, and they're arranged in a rectangle. You have a block chucking device that looks a bit like that refugee from Spud-U-Like, Seymour, but without the legs.

What you have to do is throw the block you're holding so that it hits a block of the same colour in which case both those blocks disappear. But don't worry, you don't remain blockless; the block that was next to the one that vanished flies out of the pack and is picked up by your block chucker.

Problems occur when you end up holding block with no like-coloured blocks to chuck it at. In this case you have to forfeit a go and use up one of your three spare all-purpose, any-colour-goes zapper blocks. When you run out of zappers, the game ends.



Each level has its particular qualifying number of blocks you need to get rid of. When you've destroyed the requisite



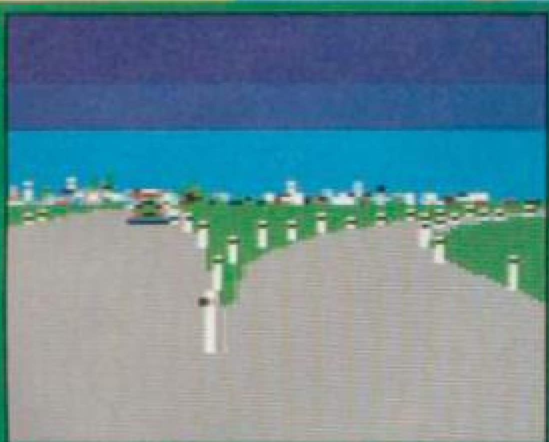


Politely stepping over all the unconscious people, Capt Haddock started her up.

Tintin lands the rocket on the moon, but it's not really a level, more like an ending.

Tintin on the Moon is an okay little game, with the emphasis on little. A game should take you more than a couple of hours to finish, otherwise you feel cheated. *Tintin* is not good or big enough to keep anyone satisfied, and makes you wonder why anybody thought it would be worth releasing on cart. I'll stick with a Twix. **Sarah**

40%



Remember, it's mirror, signal, manoeuvre.

that you don't realise the light has come on until you see the police car yourself.

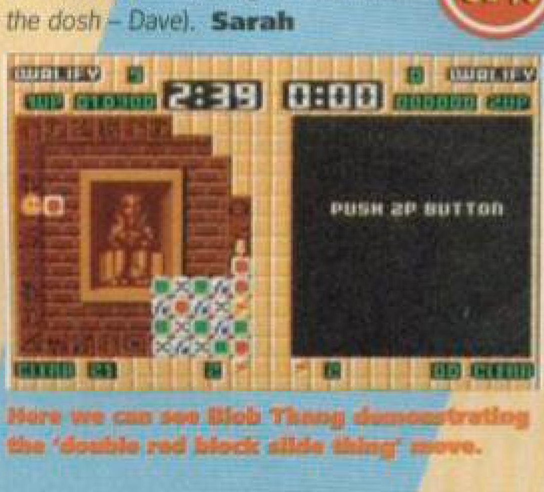
A driving sim with a purpose seems like a good idea, but this one certainly doesn't work for me. Crashing is too easy, and there are too many police cars around. Just like real life, really, and who wants that? **Sarah**

30%

number of blocks, it's on to the next level. If there are several blocks of the same colour in a line and you hit the end one, all but one will be destroyed, and you'll get loads of points. Er, I seemed to be explaining things quite well until then but I think I've lost it now. Dave, help me....

(I suppose I'd better finish this off for her. Plotting is the sort of game to play when you have a spare five minutes. But don't be surprised if that those minutes turn into hours. Plotting is well worth the dosh – Dave). **Sarah**

87%



Here we can see Blob Thang demonstrating the 'double red block slide thing' move.

Wild Streets

Available from The Software Cavern ☎ 0628 891101

New York, a few years from now. The city has become divided; half is covered in mansions, the other half is in ruins. The mansions are owned by the drug



If the worst comes to the worst, you can always just shoot someone in the face!

barons and it is they who control the city. Even Woody Allen is having second thoughts about making any more films there.

The police fight back, with a force headed by John Stevens. Unfortunately, just as the police are making headway, John is kidnapped by the



druggies and it's your job to find him and bring him home. It's a bit like *Escape From New York* but without the pyrotechnics.



You are James Taylor, a man with a 'big right hand and not afraid to use it'. Er, yes... Anyway, armed only with your trusty 357 Magnum and partnered by Black Virgin, your pet panther, you set off to teach the city to 'just say no'. Virgin will attack in your defence but not until you're nearly dead.

The game is a glorified beat-'em-up, the 'highlight' (such as it is) being the panther. The animation is laughable, and the fighting, well, what can I say in its defence? James may have eight





That dog doesn't really seem to do much, does he? In fact, he's completely useless!



moves but it's easier to keep one finger on Fire, move relentlessly to the right and just punch your way through the screens.

After seven sections you find John Stevens and then you have to find your way back without him dying on you. Hardly taxing, and hardly pushing back the frontiers of gaming. *Wild Streets*? More like *Coronation Street*. **Simon**

55%



Okay, let's play a new game called 'everybody jump'.



Pinball Magic

Available from The Software Cavern ☎ 0628 891101

Skill or luck? Which is more important when it comes to pinball? It's a debate which has been raging for decades. I wouldn't be surprised if there's a university in California that offers courses that look into this very subject.

But, the simple truth is, if you're rubbish at pinball, it *is* a game of chance, but if you've got the knack, then it becomes a game of skill – knowing how to catch the ball on the flippers, knowing where to flip it, using the tilt option to your advantage. Oddly, *Pinball Magic* is great ammunition for enforcing both points of view, but great pinball it ain't.





Since when have pinball tables started being square?

The mechanics of the game are sound enough – the ball moves around the tables realistically and satisfyingly fast; the sound FX are excellent, the flippers allow you a decent degree of control over where you flip the ball and there's a tilt option for those subtle nudges. So from a coding point of view it's a success.

Even the basic format of the game has been reasonably intelligently thought-out so that the gameplay doesn't get stuck in a rut; every time you gain a certain number of points you progress to a new table with new challenges.

The problem is the design of the tables. A good two-thirds of them are either plain dull or frustrating. And too many of them have multiple 'black spots' – areas where the ball will bounce straight out of play between your flippers if it hits them at the right (or wrong, depending on your point of view) angle.





Is it just me, or are all these pinball tables more than a little short? They're supposed to be huge.



So for the no-skill lobby *Pinball Magic* seems to be one of the games where you have little control over what's going on.

But what about your more experienced pin baller? Sure you can learn where these black spots are and use the flippers skillfully to avoid them. But generally there are so few safe areas you end up continually flipping the ball to the same parts of the tables. Yawn, and indeed, yawn.

There are some good tables – especially the *Arkanoid*-style ones, but there aren't enough. And since you can't leap straight to them (because there is no password system) every time you reload the game you have to wade through all the dull tables again. Which is a shame, because *Pinball Magic* is fun in places, but you have to prepared for an endurance test. **Dave**

58%



Never mind – I'll have a quick game of Arkanoid instead. Hold on just a minute...

Copter 271

Available from The Software Cavern ☎ 0628 891101

At first glance I thought *Desert Strike* had come out on the CPC. Nope. I slumped back into the chair. Another vertically-scrolling, helicopter shoot-'em-up, though with a bit of SF thrown in to spice things up.

Earth has been invaded by Martians. Life as we know it will come to an end if you fail this mission. So climb into your *Copter 271* and take to the air.

The screen scrolls slowly so you have to be quick to dodge the enemy. You can move up, down, left and right – dead handy that – but once the screen has scrolled by you can't go back down to blast something you've missed.



This looks like one of those 'just about to blow up' situations if you want my opinion.

And you can only fire up the screen, so if a baddie is attacking at, say, two o'clock you have to move down and right to shoot it – not very convenient.

You can pick up armaments by flying over the things that look like landing pads. These increase the copter's fire power, either with rockets or extra guns. The Martians have taken over everything, including Channel 4, so you might as well blast away at everything, because everything is bound to be the enemy.

And after a while you feel your eyes closing as the boredom creeps into your bones. It's not as though the game is too easy, or too difficult. It's just that the sea stretches on for seemingly endless screens. The swarms of alien aircraft keep coming, and the copter explodes into a fireball at the slightest impact. There is a detectable delay between the hit and the explosion which lulls you into the false security that you got away with it this time. No such luck.





And here we can see the helicopter on one of the rare occasions that it isn't blowing up or crashing.

You get more lives than a buddhist would know what to do with, so the game continues for what seems an eternity. As you die for what seems to be the five-hundredth time you have to decide, do you climb back into your copter? No, not on your nellie. Game well and truly over. Thank God. **Sarah**

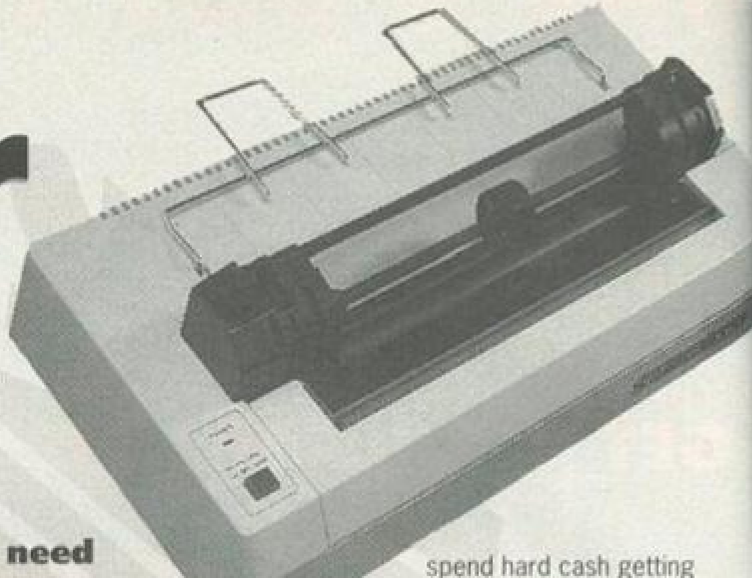




The guy on the right who's just about to die horribly is actually you in your copter.

35%

Character forming

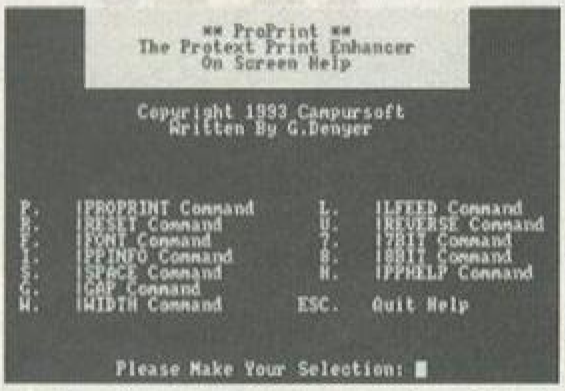


When you want to push Protext past its limits what you need is a print enhancer. One of the best is ProPrint, and now it's available on ROM. Cue Simon Forrester...

Are you bored with *Protext*? Are there things it doesn't do that you'd really like it to do? Maybe you've thought about producing a fanzine and wanted to stretch your word processor that little bit further to bridge the gap between WP and DTP. If so, Campursoft may have just released the answer to all your problems, in the form of the ROM version of *ProPrint*.

If you want to know the full story on the original disk version, either hunt around under the bed for issue 94, or order it from back issues if you didn't get hold of it the first time round. For all of those who don't want to bother, here's the basic idea in a nutshell:

When you're word processing in *Protext*, you can use what are known as control codes. These are used to alter the style of the text, underlining, printer configuration, things like that, in all the usual ways. However, *ProPrint* patches these codes, allowing you not only to change text attributes, but change text styles (fonts) altogether, as well as printing various useful graphics, such as boxes, etc.



That's what we like to see – loads and loads of on-screen help, at the touch of a button.

Custom-built

The other side to *ProPrint* is the font designer, a handy little program that allows you to design custom fonts for special uses, or alter the existing ones. How much simpler could life be?

Well, life could be a little bit simpler. For a start, I'm sure they could do something about milk cartons, and when they've finished with them, putting *ProPrint* on to ROM would be a good move, as loads of people don't want to spend hard cash getting an instantly accessible *Protext* ROM only to be slowed back down by having to load up *ProPrint* from disk. Oh – they have. I bet milk cartons are still pigs to open, though.

Seriously pleasurable

Basically, what we deemed a decent little package back in issue 94 is now even more likely to make your life seriously more pleasurable, as the *Protext*-patch half of the package now comes on a ROM chip (accompanied by a font disk containing, among other things, the font editor).

You want a verdict? Okay then. *ProPrint* is definitely a package that any serious-minded Protext user should consider getting hold of. 'Nuff said. **Simon**

Details

PRODUCT: ***ProPrint* on ROM**
PRICE: £24.99 (£10 discount for existing *ProPrint* users)
AVAILABLE FROM: Campursoft, 10 McIntosh Court, Wellpark, Glasgow, Scotland G31 2HW ☎ 041 554 4735.

Pro-extras

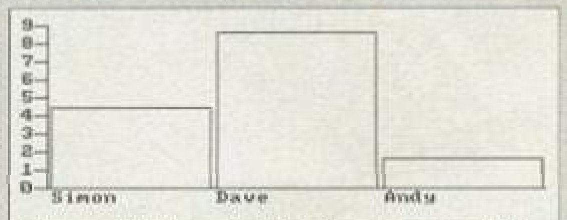
Why put up with your old Protext when you can customise it with Pro-Ext? Simon Forrester discovers what the upgraded version has to offer.

Uncanny. Not just the fact that we're reviewing two *Protext* prince enhancers in the same issue, but the facts that they're both updates, and both of their predecessors were reviewed in the same issue (*AA*93 for all you Back Issue freaks out there).



In the original contest Sentinel Software's *Pro-Ext* was outclassed only marginally by Campursoft's *ProPrint*. The main problem was the lack of a font editor. In this rematch, then, does *ProExt* close the gap? Let's check out what it has new to offer:

- **Charting package** – This is a great little function which allows you to present statistical data in eye-catching ways. And it's dead easy to use, as well. All you have to do is enter a set of numbers and categories, and *Pro-Ext* will be quite happy to convert those figures into a bar chart, pie chart or whatever, ready for you to paste on to a *Protext* page by way of a simple control code.
- **Font Editor** – This is something that you should find incredibly useful, because when you're bored of all the usual fonts you can start to design your own! Hang on... I think I'm getting this strange sense of déja vu... (*I wouldn't be at all surprised – check out this month's covertape – Dave*). Never mind. Anyway, let's get on to the summary-type thing.



Hmm... What could this chart represent?

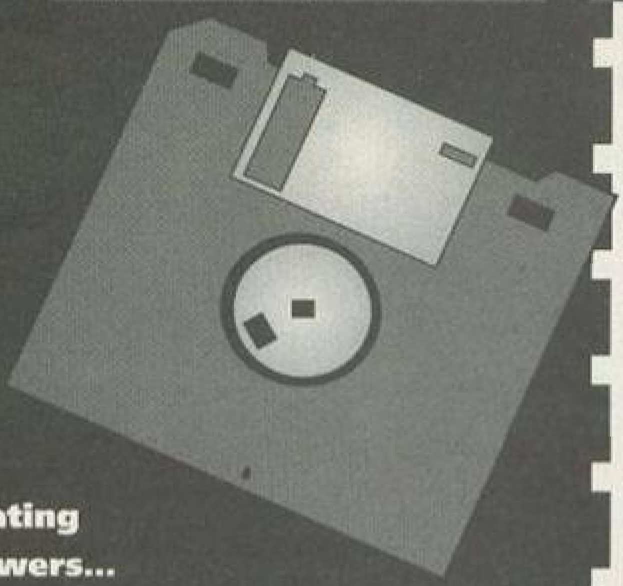
The summary-type thing

Pro-Ext seems to be picking up momentum and threatening to challenge *ProPrint* in the must-have department. It's a pity the extra features weren't included the first time round, but thankfully they're here now, and they improve the package mightily. So if you want a *Protext* print enhancer but don't want to go to the expense of the Campursoft ROM, this should be your first choice. **Simon**

Details

PRODUCT: ***Pro-Ext***
PRICE: £15
AVAILABLE FROM: Sentinel, 41 Enmore Gardens, East Sheen, London SW14 8RF ☎ 081 876 7032

Paradise DOSsed?



Is the world big enough for another high capacity disk operating system? Is your ROMbox? Simon Forrester may have the answers...

Maybe you didn't buy *RAMDOS, ROMDOS, ROMDOS XL, RODOS, 400 K/S, MS800, S/DOS, Xexor* or *MagicDOS* that we so graciously gave away on the covertape. Maybe, just maybe, you've got a 3.5-inch disk system on which you're only storing 180K because you've been living on Mars for the past year. Maybe you do want another DOS system. Why should you, though? Well, that all depends, now, doesn't it...?

Let battle commence

So the 10th episode of the battle of the DOSses is a 16K ROM chip called *ParaDOS*, ready to sit very neatly in either ROM slot seven of your CPC (Quantum do that bit for you if you ask really nicely), or in any other slot you choose. It's the standard 'bung this chip into any available hole, and it should sort itself out' arrangement, making the product truly flexible and compatible with almost any set-up. So what sets this one apart from its nine predecessors?

Let's talk formats – disk formats. *ParaDOS* has got a pretty good selection, really, and will happily cope with all manner of *ROMDOS, S/DOS* and infinite other disk formats.

Great, it's another high capacity system, the only difference being that this one really is going to have to do something special to justify its creation. Unfortunately, fire-juggling is a bit difficult for most humans, let alone lumps of silicon, so I'll settle for something a bit more useful.

Disk management

ParaDOS behaves just like any normal high capacity disk ROM until you issue the IDRIVE command without a parameter. When you do, you'll get dropped into *ParaDOS* proper, the disk and file management utility that this package is based on. What does it do, then?

- File copying – Well yes, that's essential really, isn't it? (Don't argue). The point is that at some point you may have files on one disk that you want to transfer to another. You could just load them in and save them out if they were purely BASIC or purely Machine Code files, but what happens when you've just got a bunch of 10 mixed files, and you want to move all of them? This is where *ParaDOS* helps out, with a multiple file copier.
- Backing up – Note, that's 'backing up', not 'shamelessly copying'. There is a big difference. You have been warned.
- Attributes – This is for stuff like defining system files as system files, read-only files as read-only files, and... well, I think you get the general idea. It's one of those handy functions that you never realised you wanted until you've used it for a while.



The handy file selector system is a Godsend for multiple file operations.

What's more...

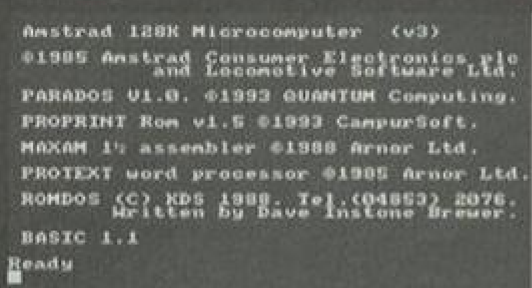
Yeah, okay, so there's a lot more to *ParaDOS* than just three functions; suffice to say it should take care of most of your needs when DOSsing about (*you are most definitely fired – Dave*). Is it in the least bit useable though? No, it isn't.

Only kidding, Quantum, of course it is – I just thought I'd make you sit up. When a disk is 'logged' on to the package, its files are displayed in a clear table, showing user areas and file attributes as well as filenames. Down the right-hand side of the screen is a little box giving all sorts of important information about the disk you're working on and its format, as well and the CPC's own available buffer space.

All selections are made via a little menu bar that sits across the bottom of the screen, with the normal functions on display. If you were to hold down control, though, you'd see (and therefore be accessing) the 'all files' menu, in which whatever operation you select will be carried out on all files (as opposed to just one). The shift key is quite happy, incidentally, to display the disk functions (such as format, verify, configure, etc) as opposed to file operations (as you'll find on the other menus).

Room for one more?

So should you buy it? Well, it's hard to say to be honest. If you've got *ROMDOS* and *MAXIDOS*, I wouldn't worry too much about getting hold of *ParaDOS*, as you've got the lot already. If you've only got one or the other, though, and you need a utilities ROM or a high capacity DOS ROM, *ParaDOS* really does look like it's the one to get – it supports every other disk format the CPC is ever likely to see, and should stand you in good stead for a long time to come. **Simon**



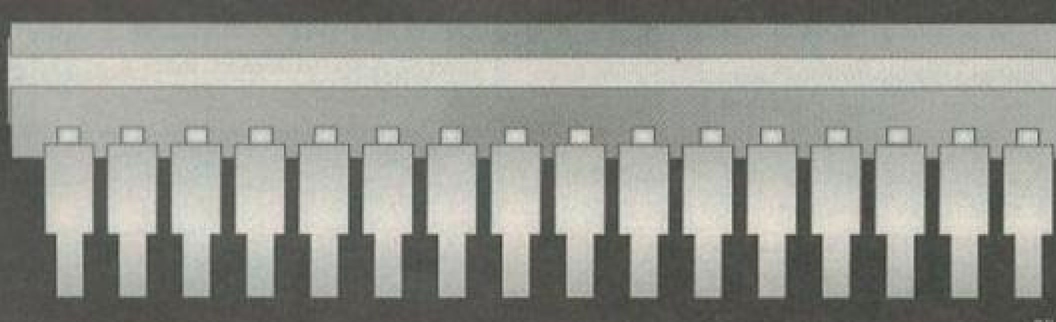
How would you like to have a slightly more powerful sign-on message?

Details

PRODUCT: *ParaDOS* ROM
PRICE: £25
AVAILABLE FROM: Quantum Computing, 10 Lakin Drive, Barry, Mid Glamorgan, South Wales CF6 5AJ ☎ (0446) 746920

- If you have any doubts about fitting a ROM to your machine, or you want Quantum to do it, we strongly advise ringing them before you send money all over the place.

One final thing – you might have a copy of *ROMDOS, RODOS, S/DOS, ROMDOS XL, Xexor*, etc, on ROM already. If so, you won't really need it once you've got *ParaDOS*, so send it along with your order for a £5 discount.

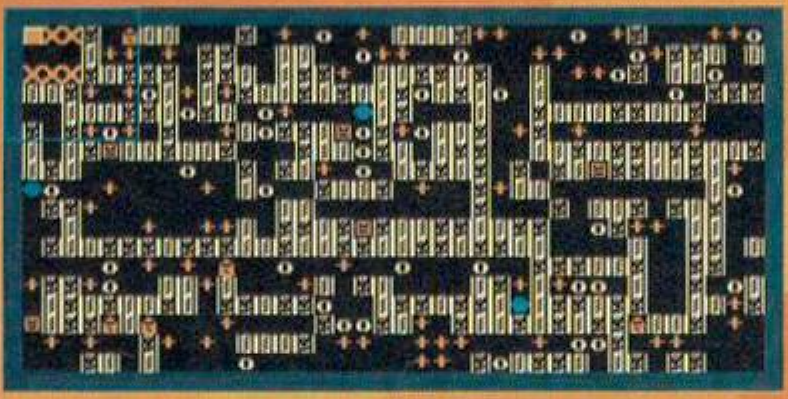


Stellar Outpost

Forget Ripley. Skywalker went out with green nylon shirts and Buck Rogers can't help you any more. There's an alien-infested Stellar Outpost out there somewhere, and only one man can save the day – Spacetrooper Forrester.

Chess – the ancient battle of wits between two warring minds expending countless soldiers in the quest for victory. Soldiers on horseback charge forward into the melée, defending the honour of queens, while bishops remove assassins with deadly blows of a sceptres. There is no place for God on the battlefield.

Or if chess is a bit too staid for you, try this for size – there's a swarm of aliens somewhere on a spaceship, and you've got a very serious problem on your hands – they're hungry. Armed only with an enormous gun that fires just about anything that might possibly hurt, maim or disfigure, you've got to track them down and get some serious eradication in before tea time.



The handy map screen gives you the locations of your troops, notable objects, spottable aliens and lots and lots of walls.

Or how about a combination of the two? Sort of a cross between Ripley and Nigel Short versus the alien scum? Alien-bashing whilst being painfully thin in a suit? What if we painted squares on to the floor of our space station as well, and asked the mutant insectoids from the planet Death in the Not-very-nice-at-all Quadrant to kindly keep to the squares, thank you very much?

Seriously, though, if you'd played enough fast action alien-bashing games to last you a life time, why not sit down and work out your attacks strategically? That's right – in essence *Stellar Outpost* is a strategy game. I, being the sort of chap who either likes to sit down at a chess board or go into bald-headed psycho mass-murder specials with a big gun, was of the opinion that this strange hybrid of the two was going to be about as exciting as cold porridge.

But I was wrong (there's a first time for everything). *Outpost* is anything but dull. The plot is simple; you command a crack troop exploring a space station infested with aliens. It's your job to clear it up and get the generators back on line. Your troop consists of various specialists:

- Troopers – your standard meat-head blokes, who chew a lot of gum and have huge teeth (*a bit like Dave, then – Andy*).
- Navigators – these blokeys are fairly useless, but they do know how to use those alien detectors that build up so much tension in films.
- Engineers – spanners are pretty good all-rounders, really; they're good for destroying walls and setting up barricades.
- Medics – or rather 'medic'; you only get the one, and once they get their hands on a medical kit, they do all that human kindness stuff, and patch up your team.

And so, with your crew assembled (they teleport on to the station two by two) – "Let's go to work.".

You don't move your men in the normal action/exploration game manner, using the joystick – instead, you have a cursor which you move around the screen and use to select which player you want to move and make them to do their stuff.

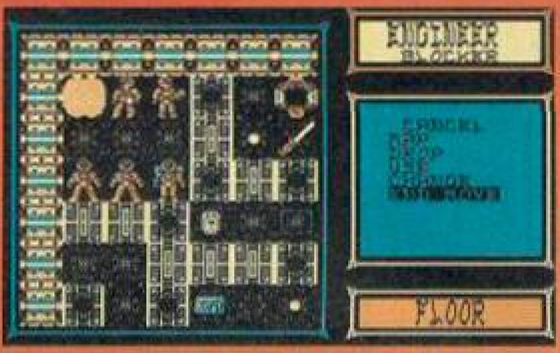
The game is divided into 'turns'. On your turn, each of your men has a number of action points, which are depleted when they move, pick things up, kill things, etc. So when you've moved all your men where you want them, or failing that left some of them standing around (the choice is yours), you end your turn, and it's the aliens' turn to have a go.

The scary thing is that when your troop is stomping about, the aliens are dormant – you can walk right up to them and kill them. This does mean, though, that when the aliens take their turn, your men suddenly become less mobile than arthritic snails. Why have this kind of system? That's where the gameplay comes in...

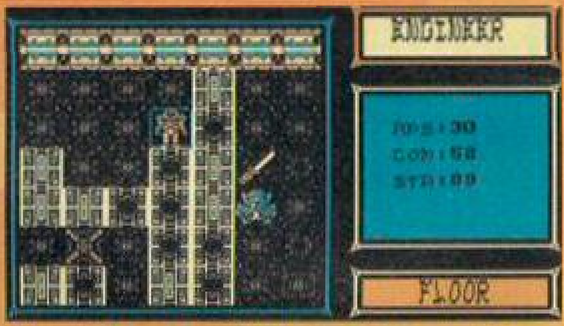
You see, this is what makes it a strategy game (I did mention the fact earlier) – you have to plan ahead. As most of the aliens are invisible (well, the station is out of power so the lights are out, and your men can only see them when they get into torchlight at close range), you have to think about attack, exploration, and defence strategies – it's like a game of chess, except for the fact that you get to move several pieces each turn.

I could spend all day explaining how this game works, because it's incredibly detailed – not complex, just detailed. Whereas with chess a newcomer would have to remember how each piece moved, and then fight off fiendishly clever attacks from their opponent, *Outpost* has rules simple enough to make it instantly playable even for the complete beginner, while retaining the kind of depth that keeps you going back for more.

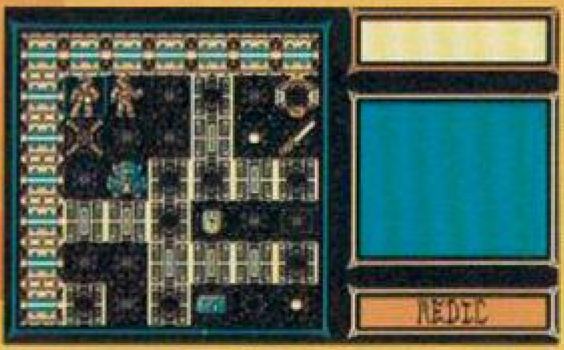
I usually loathe strategy games. The thought of reviewing one really didn't fill me with the kind of enthusiasm suitable for giving a game an impartial review. All I can tell you is that *Outpost* managed to convert me. **Simon**



The alien dispatched, Pete decided it was safe to crowd the place out with his mates.



The engineer frantically looked around for the TV he was supposed to be fixing.



Shortly after teleporting, Pete was surprised to be mauled by a huge green alien thingy.

Stellar Outpost data

To get hold of a copy, just send a cheque for £4.99 (tape) or £6.49 (disk) to Angela Swinbourne, 11 Vicarage View, Redditch, Worcestershire B97 4RF.

VERDICT

GRAPHICS — **60%**
They're not really much cop – messy and not entirely clear.

SONICS — **55%**
A few strange farty noises and that's about yer lot.

GRAB FACTOR — **75%**
Though it's a bit slow it's instantly playable, and draws you in.

STAYING POWER — **85%**
And once you're hooked, that's it – you'll be alien-bashing for ages.

RATING 85%

Back issues

SOLD OUT! Issues 1-65, 67-74

Still available: Issues 66, 75-97



Issue 91: All the dirt on who's doing what in the CPC world.HackIt black box of tricks reviewed. On the tape: *Tasword* (word processor) and *Colossus Chess 4*.



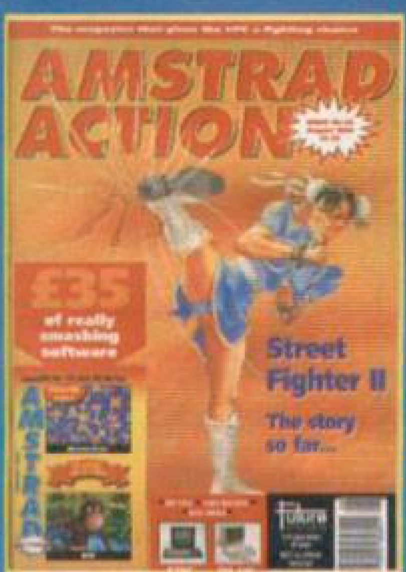
Issue 92: Just how do those floppy disc things work? Plus a review of the first 3.5 inch A: drive. On the tape: *BooTracker* (music utility), *SYNTAX* and *Balloon Buster*.



Issue 93: 101 interesting things to do with business software. Reviewed: *Super Cauldron*, Amstrad Pen Pad. On the tape: *Racing BoxForm*, *Mystical*, *Balrog*.



Issue 94: The very best software and kit for your CPC. *Prehistorik II* reviewed. On the jolly old tape: *Instant Recall* (database), *Contraption*



Issue 95: *Street Fighter 2* progress report. *Trakers* reviewed. A brief history of the computer game. And in loadable form on the tape: *MasterCalc* and *Biff*



Issue 96: The secrets of ROMs and carts revealed, and the start of our complete cart round-up. On the tape: *Screen Designer* (art package) and *Neil Android*.



Issue 97: Don't spend a fortune. Discover the best budget games and low cost serious software. Plus: the excellent *Zapp Assembler* adorns the covertape.



Issue 98: We reveal the secret of an easy life – hints on tips on making all aspect of your computing life less of a chore. On the covertape: the complete *Blues Brothers*.

Amstrad Action Back Issues

Name ______________________

Address ______________________

____

____

Post code __________ **Phone No** __________

Method of payment (please tick)

Access ☐ **Visa** ☐ **Cheque** ☐ **PO** ☐

Credit Card No ______________________

Expiry date ______________________

I would like the following back issues...

____

UK price – original cover price ● Europe £5 ● Rest of the world £7 ● Post and packing is £1 per order (regardless of size).

Please make all cheques payable in pounds sterling to Future Publishing Limited, and send the whole lot off to AA Bargain Basement, Future Publishing, FREEPOST, Somerton, Somerset TA11 7BR.

Future Publishing Limited,
30 Monmouth Street,
Bath, BA1 2BW
Tel: 0225 442244
Fax: 0225 446019

Editor Dave Golder
Art Editor Andy Ounsted
The Hairy One Simon Forrester
Contributors Richard Fairhurst, Tim Blackbond, Debby Howard, Lee Rouane, Sarah Tanser, Keith Woods
Photography Andy 'are you sure this in my contract?' Ounsted
Cover Illustration Andy 'is this a joke?' Ounsted
Senior Ad Sales Executive Caroline Simpson
Ad Sales Executive Robert Bennett
Publisher Colin Campbell
Group Publishing Director Greg Ingham

Production Craig Broadbridge
Lino and Scanning Simon Chittenden, Jon Moore, Chris Stocker, Simon Windsor, Jason Titley, Mark Gover, Nick Harvey
Subscriptions Christine Stacey
Tel: 0458 74011
Circulation Manager Jon Bickley,
Tel: 0225 442244

Printed in the UK

Future PUBLISHING

'Your guarantee of value'

This magazine comes from Future Publishing. Here's what we can offer you:

Better advice. Our titles are packed with tips, suggestions and explanatory features, written by the best in the business.
Stronger reviews. We have a cast-iron policy of editorial independence, and our reviews give clear buying recommendations.
Clearer design. You need solid information fast. So our designers highlight key elements by using charts, diagrams, summary boxes, annotated photographs etc.
Greater relevance. At Future, editors operate under two golden rules:
• Understand your readers' needs.
• Satisfy them.
More reader interaction. We draw strongly on readers' contributions, resulting in the liveliest letters pages and the best reader tips. Buying one of our magazines is like joining a nationwide user group.
Better value for money. Magazines you can trust.

Home of Britain's finest magazines.

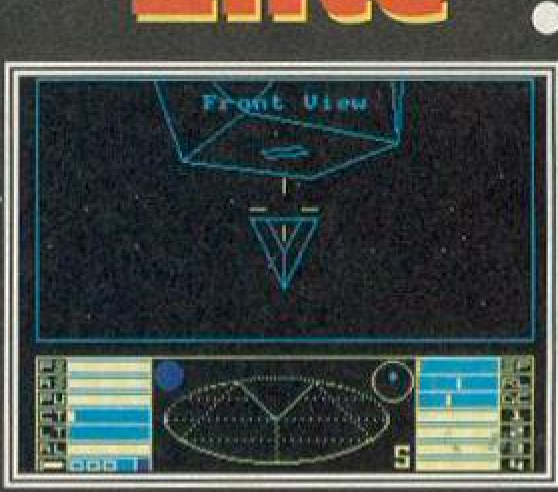
Commodore Format • PCW Plus • PC Plus • PC Answers • PC Format • Amiga Format • Amiga Format Specials • ST Format • Sega Power • TOTAL! • Amiga Power • Amiga Shopper • Super Play • Mega • GamesMaster • Mac Format • Edge • Game Zone • Sega Zone • Future Music... and also Classic CD • Mountain Biking UK • Cycling Plus • Needlecraft • Cross-Stitch Collection • Caravan Plus and many more

ABC 21,832
Member of the Audit Bureau of Circulations Feb '93 - Jun '93

Next Month

AA 100

Join the Elite



Be here

On sale: Thursday 25th December

NOW A TOTAL MOUSE/ GRAPHICS PACKAGE FOR YOUR AMSTRAD AT A TRULY UNBEATABLE PRICE!!

DATEL Electronics





Genius Mouse COMPLETE WITH OCP ADVANCED ART STUDIO

SPECIAL OFFER PACK!!

- **Genius Mouse is a high resolution two button mouse featuring optical counting, teflon guides, microswitches, rubber coated ball and high quality interface.**
- **When combined with OCP Advanced Art Studio this graphics package is quite simply the best system available. The features are unmatched...**
- Create an image - shrink it, expand it, move it, rotate it, copy it, colour it, etc., etc.
- Spray patterns or shades, make elastic lines - stretch and manipulate shapes.
- Zoom in to add detail in fine mode. • Full cut and paste facilities plus excellent printer support.
- Pulldown/Icon driven menus for ease of use. • Mouse operation, plus joystick and keyboard control.
- 16 pens, 8 sprays, 16 brushes - so flexible anyone can create superb graphics easily.

TAPE OR DISK FOR 464 OR 6128 (PLEASE STATE WHICH REQUIRED) N.B. 464 NEEDS DK'TRONICS 64K RAM PACK

COMPLETE WITH MOUSE INTERFACE



- The Genius Mouse Graphics System comes complete with the special Mouse Interface to allow super smooth control.
- Attractively styled to match your 464 or 6128 design and colour. Simply plugs into Expansion/Joystick port.

ONLY £49.99

TOTAL PACKAGE INCLUDES GENIUS MOUSE, INTERFACE, OCP ADVANCED ART STUDIO PLUS FREE MOUSE MAT AND HOLDER

FREE! MOUSE MAT AND MOUSE HOLDER (WORTH £12.99) WITH EACH PACKAGE

NEW



LC 200 COLOUR PRINTER PACKAGE

NOW YOU CAN PRINT OUT YOUR PICTURES IN FULL COLOUR!

- The Star LC200 Colour Printer not only prints in Near Letter Quality for your regular jobs but also prints out your pictures from Art Studio, etc., in genuine colour!
- LC200 is a full Centronics printer so it works with other computers (Amiga, ST, etc.).
- Made possible by Datel's unique colour printer driver - now you can have a hardcopy in up to 16 colours!! • No more to buy - just plug in and print!!

PACKAGE INCLUDES... STAR LC200 COLOUR PRINTER RRP £299.00
CENTRONICS PRINTER LEAD RRP £9.99
DATEL COLOUR PRINTER DRIVER SOFTWARE RRP £19.99
NORMALLY £327.98

COMPLETE PACKAGE NOW ONLY £239.00

COLOUR PRINTER DRIVER AVAILABLE SEPARATELY ONLY £19.99

- If you already have an LC10 or LC 200 Colour Printer we can supply the Driver separately.

dktronics



- Simple plug in memory expansion gives instant extra memory.
- Features bank switching software for easy use by the programmer or for use as a data storage area.
- Ideal for use with the CPM 2.2 etc.
- The software also features some extra BASIC commands.
- 64K unit expands 464 to 128K.
- 64K unit brings 464 up to CPC 6128 memory configuration making a much larger software base available. Will work straight off with many programs designed for this unit (including OCP Art Studio - see Ad.).
- Bank switching done automatically by software (cassette 464).

64K MEMORY EXPANSION

ONLY £49.99 64K FOR 464

DATEL Electronics LIMITED

HOW TO GET YOUR ORDER FAST!

TELEPHONE [24Hrs] 0782 744707 CREDIT CARD ORDERS

ORDERS NORMALLY DISPATCHED WITHIN 48 Hrs. ALL CHEQUES/POSTAL ORDERS MADE PAYABLE TO...

DATEL ELECTRONICS

GOVAN ROAD, FENTON INDUSTRIAL ESTATE, FENTON, STOKE-ON-TRENT, ST4 2RS, ENGLAND. FAX 0782 744292 TECHNICAL/CUSTOMER SERVICE 0782 744324

DATEL LONDON SHOP



222, TOTTENHAM COURT RD, LONDON, W1. TEL:071 5806460